

DATE: December 15, 2011

TO: Cheryl Hawkins, U.S. EPA/ERT Work Assignment Manager

THROUGH: Dennis Miller, SERAS Program Manager

FROM: Christopher Gussman, SERAS Task Leader

SUBJECT: JEWETT WHITE LEAD SITE 2011 FIELD ACTIVITIES
JEWETT WHTIE LEAD SITE
WORK ASSIGNMENT: SERAS-138
TRIP REPORT

*Chk for DMR
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INTRODUCTION

The Jewett White Lead Company is an approximately one-acre site located at 2000-2012 Richmond Terrace in the Borough of Staten Island, Richmond County, New York (NY). The site is the former location of a lead paint manufacturing facility, and various other businesses have since operated at the site including an ice cream factory. Buildings at the site were destroyed in several fires during the 1990s, and the remaining structures and debris were cleared from the area by 2000. The original site is currently a fenced and unpaved area without building structures. EPA was contacted in June of 2008 to evaluate the site for possible cleanup. In June 2009 several soil samples were collected for lead analysis in the residential and industrial areas surrounding the site.

The current investigation focused on four properties bordering the Kill Van Kull and in proximity of the former site. Scientific, Engineering, Response and Analytical Services (SERAS) personnel were tasked with providing technical support to the Environmental Protection Agency/Environmental Response Team (EPA/ERT) and EPA Region 2 to better define the distribution and concentration of lead in soil and water on these four properties and in offshore sediment and water downgradient of the site. To achieve this goal, SERAS subcontractors installed three flush-mount wells, advanced Geoprobe cores at 18 locations up to 8 feet deep, and vibracored offshore at six locations to collect sediment cores. Water samples were collected by SERAS personnel offshore at three depths at each of four locations. Filtered and unfiltered water samples were also collected from four site wells at both high and low tide. SERAS personnel provided sampling support and conducted X-ray fluorescence (XRF) screening of the soil cores. Region 2 EPA provided analytical services for the collected soil, sediment, and water samples other than XRF. The scope of work, goals, detection limits, and other relevant information regarding this effort may be found in the June 23, 2011 Quality Assurance Project Plan for Jewett White Lead Site (UFP-QAPP).

FIELD ACTIVITIES

Dates of Field Activities

This 2011 field effort was spread out over four separate field events from July through September 2011 as follows:

- July 18, 2011. Soil core samples were collected at 1983 Richmond Terrace.

- August 2, 2011. Soil core samples were collected at 2035 and 2037 Richmond Terrace.
- August 10, 2011. Water samples were collected from the Kill Van Kull at 2015 Richmond Terrace. The three new wells were also installed at 2015 Richmond Terrace on this date.
- September 13 2011. Sediment samples were collected within the Kill Van Kull at 2015 Richmond Terrace and water samples from the four on-site wells were sampled this same date.

The proposed sampling plan may be viewed in Appendix A. Figure 1 indicates the properties of interest and the locations of the soil, sediment, and water samples. These locations were altered slightly in the field due to topography, physical structures, and underground anomalies.

Ground Penetrating Radar and Radiodetection

Prior to collecting soil samples and installing the wells, a geophysical survey to confirm boring locations were clear of underground utilities was conducted using a Radiodetection® RD-4000 pipe locator and a Sensors and Software® SmartCart Noggin, which is a ground penetration radar (GPR) device with a 250 megahertz (MHz) antennae.

Soil Sampling

A Direct Push rig operated by New Jersey Boring and Drilling (Newark, New Jersey) was used to collect the soil cores to a depth of 8-feet below ground surface (bgs) or refusal from the three properties adjacent to the original Site (Figure 1). Eighteen locations had been preselected prior to field activities along a grid of approximately 100 feet. The 1.5-inch-diameter cores were removed and the sleeves handed to SERAS personnel for examination and processing. The cores were divided into one-foot intervals. Each soil sample was given a unique identification (JWL-SoilX-Y) where X= 1 to 18 according to the sample location and Y= A through H according to depth where A is the surface 0-12" bgs, B= 12-24" bgs, C= 24-36" bgs, D= 36-48" bgs, E= 48-60" bgs, F= 60-72" bgs, G= 72-84" bgs and H= 84-96" bgs. Sample identification conformed to SERAS standard operating procedure (SOP) #2002, *Sample Documentation*. The soil cores were logged (Appendix B) by a SERAS geologist and each sample interval was homogenized and prepared for analyses. Samples sent for XRF analyses were placed in a 4 ounce (oz.) jar and submitted to the ERT/SERAS Laboratory. These samples were logged in and forwarded to the SERAS XRF Chemist for drying and analysis.

Soil XRF Analyses

A NITON XLt792YW Field-Portable X-ray Fluorescence (FPXRF) analyzer, maintained and operated by SERAS personnel, was used to support EPA/ERT activities at the Jewitt White lead site. A SERAS XRF Chemist analyzed the samples for the primary target element: lead.

A total of 141 soil/sediment samples and 14 laboratory duplicates were analyzed. The NITON XLt792YW FPXRF measurement times (instrument live-time) were 120 seconds for measurement condition 1 (Filt1 for lead) and 30 seconds for measurement condition 2 (Filt2).

Sample preparation, analysis, and quality assurance/quality control (QA/QC) procedures used in this study conform to those described in the SERAS SOP #1720, *Operation of the NITON XLt792YW Field Portable X-ray Fluorescence Instrument*.

Site soil/sediment samples were received by the SERAS laboratory in labeled glass jars. Each sample was further homogenized with a stainless steel spoon. Stones and debris were removed prior to placing 10-20 grams of the sample into a labeled aluminum weighing dish. The samples were dried in an oven for 1-2 hours as necessary. Duplicates were prepared for approximately every 10 samples and the suffix

"DUP" was added to the sample ID for the duplicate sample. After drying, the sample was ground using a mortar/pestle if necessary and then passed through a 10-mesh stainless steel sieve to remove large material. The sample was then placed in a labeled 31-millimeter (mm) polyethylene X-ray sample cup and sealed with 0.2-mil (5 micrometer) thick polypropylene X-ray window film. Prior to XRF analysis, each sample cup was tapped against the tabletop to pack the sample evenly against the film window. The XRF cup was placed in the NITON portable test stand (film side down) above the NITON XLt792YW analyzer, the safety shield was closed, and analysis was initiated with the measurement times previously noted.

XRF analysis results for each sample were saved in the NITON XLt792YW internal data logger memory. The data were downloaded and archived on a USB drive on a daily basis. Target element (lead) results for each analyzed sample and standard were logged into the NITON XLt792YW field logbook (SERAS-L-0113). Target element results were qualified using the field method detection and reporting limits discussed in this report. Preliminary results are screening level (SD) data only.

The reliability of the NITON XLt792YW FPXRF unit and application model was evaluated during the sample analysis. The Detector Calibration (energy calibration and detector resolution check) was performed at the beginning of the day to ensure that proper instrument calibration was maintained and that the detector resolution was adequate for producing reliable X-ray intensity measurements. The NITON XLt792YW Standard Soil application was verified at the beginning of the day for the target element. This was accomplished by analyzing Sand and SiO₂ blanks, and National Institute of Standards and Technology (NIST) Standard Reference Materials (SRMs) #2709, #2710, #2711, and #2586. Energy calibration checks, detector resolution checks, and application verification results were recorded in the NITON XLt792YW field logbook (SERAS-L-0113).

A low concentration standard, NIST SRM #2709, was analyzed at the beginning of the day and periodically during sample analysis to establish statistically derived method detection limits (MDLs) for lead. The certified concentration for the target element in SRM 2709 was 19 milligrams per kilogram (mg/kg). The sample standard deviation for these analyses was used to calculate the MDL for lead. The MDL was calculated as:

$$MDL = t(n-1,99) * \sigma_s$$

where:

$t(n-1,99)$ = student's t-value for a 99% confidence level and a standard deviation estimate with $n-1$ degrees of freedom

σ_s = sample standard deviation ($n-1$ degrees of freedom).

Typically the reporting limit (RL) is 2-5 times the statistical MDL for XRF analysis of soil/sediment samples. The lead RL was 60 mg/kg. NITON XLt792YW results were qualified by "U" for values less than the RL.

The NITON XLt792YW analysis precision for lead was determined using a Laboratory Control Sample (LCS), ERA D040540. The nominal (NOT certified) spiked value for lead in this sample was 168 mg/kg. The percent relative standard deviation (%RSD) value was within the specification of 20 percent (U.S. EPA/ERT 1991).

Preliminary screening level results for lead were reported on 25 July 2011 and 08 August 2011 and may be found in Appendix C. Selected samples were sent to the EPA Region 2 Division of Science and Assessment (DESA) Laboratory for confirmation.

Soil Core Characterization

Prior to processing, the soil cores were photographed (Appendix D) and logged (Appendix B).

The Site lies in an area where the water table varies from 2.5 to 8 feet bgs. Groundwater on Staten Island occurs under both confined and unconfined conditions, but at the Site groundwater occurs under water-table conditions or unconfined.

Soil borings JWL-SOIL-1 through JWL-SOIL-18 are located on an industrial facility that overlies a former marshland or swampy areas adjacent to Arthur Kill. The facility was built upon artificial fill. The stratigraphy of the Site is characterized by former marshlands areas filled with anthropogenic/artificial fill that was backfilled from adjacent areas during urbanization and development periods in Staten Island in modern times. The geology of the site is characterized by artificial fill that is underlain by marsh deposits and glacial moraine deposits. The artificial fill is predominantly composed of coarse to fine sand, angular gravel, silt, demolition debris (including brick pieces) and dredge spoils. The artificial fill is underlain by marsh deposits that are predominantly composed of meadow mat and organic clay. Subsequently, marsh deposits are underlined by glacial moraine deposits that are predominantly composed of angular gravel, sand and serpentine. Glacial moraine deposits were made as an ice sheet moved into Staten Island and deposited its more dense mass of rock material. Glacial moraine deposits were observed on soil boring JWL-SOIL-4 at a depth of 7 feet bgs. Refer to Appendix B for detailed Soil Boring Logs.

Interaction of Site Groundwater and the Kill Van Kull

The area of interest lies adjacent to the Kill Van Kull on the northern boundary of Staten Island. Four wells (MSC-1, MSC-3, MSC-4, and MSC-5) were sampled to see if lead from the site may be present in groundwater. These four wells are within a few meters of the Kill Van Kull, which is tidal in nature. It was unknown to what extent, if at all, the groundwater and Kill Van Kull interacted. For that reason it was decided by EPA Region 2 to place transducers in the Kill Van Kull and nearby in one of the nearby wells of interest.

A transducer was placed in the Kill Van Kull at the northwest corner of the property at 2015 Richmond Terrace to record fluctuations in water level within the Kill Van Kull. A second transducer was placed within well "MSC-1" on this property to compare the water levels within the well and the nearby Kill Van Kull. The transducer within the Kill Van Kull was placed within a 4-inch diameter piece of polyvinyl chloride (PVC) perforated along its length to allow free movement of water through the pipe but protect it from damage by free floating material. The transducers recorded water depth at 15-minute intervals. Data for a typical time period may be found in Appendix E.

The data from the transducers clearly indicate that the water in the wells is closely influenced by water and tides in the Kill Van Kull.

Well Installation

Three new 2-inch diameter wells were installed on August 10, 2011 at 2015 Richmond Terrace by New Jersey Boring and Drilling (Figure 3). These three new wells were labeled MSC-3, MSC-4, and MSC-5. Wells MSC-1 and MSC-2 already exist on site. Detailed logs of the construction of well MSC-5 may be found in Appendix F, MSC-5 being typical of all three of the new wells. A soil sample was collected at the water table from the cores during well installation. The new wells were allowed to settle and were then developed on August 15, 2011.

Water Sampling

Filtered and unfiltered water samples were collected from one pre-existing well, denoted as MSC-1 and from the three newly installed wells (MSC-3, MSC-4, and MSC-5). Samples were collected in accordance with SERAS SOP# 2007, *Groundwater Well Sampling* using a portable pump and dedicated tubing. Samples, both filtered and unfiltered, were collected from the four wells at both high and low tides. Collected water samples were submitted for inductively coupled plasma (ICP) metals analysis to the R2 DESA laboratory.

Filtered and unfiltered water samples were collected just off-shore of the bulkhead at 2015 Richmond Terrace at multiple depths (surface, middle, and bottom) at four locations within the Kill Van Kull paralleling the four wells above (see Figure 3). These water samples were collected in accordance with SOP # 2013, *Surface Water Sampling*. A 4-liter Kemmerer bottle was used to collect the samples. After lowering the Kemmerer Bottle to the desired depth, a governor was used to close the bottle and trap the water sample. Filtered samples of water were filtered through a high capacity in-line groundwater sampling capsule with a 0.45-micron filter manufactured by Pall Corporation (Ann Arbor, Michigan). Samples were collected within a 1.5-hour interval surrounding high tide. These water samples were then submitted for ICP metals analysis to the Region 2 DESA laboratory.

Sediment Sampling

Vibracore sampling was attempted at six locations within the Kill Van Kull offshore of 2015 Richmond Terrace and between two large docks that run from the property into the Kill Van Kull (see Figures). Atlantic Testing Laboratories (Canton, New York) performed the vibracoring. Rock and other debris prevented collection of samples at location 2 and location 3 despite several attempts. Successful cores were collected at locations 1, 4, 5, and 6 (Figure 4). Cores were processed on site and samples delivered to the Region 2 DESA Laboratory for analyses.

RESULTS

Analytical results were evaluated to determine if concentrations of lead exceeded the project action limits for lead specified in the site-specific UFP-QAPP of 800 mg/kg in soils, 31 mg/kg in sediments, and 50 μ g/L in water. Previous investigations had determined that lead extends through the water table at the 2015 Richmond Terrace property with some lead impacts to the groundwater along the waterfront, but it was not known whether the lead contamination has migrated to neighboring properties or into the surface water and sediments of the Kill Van Kull. Further sampling was performed to determine if elevated levels of lead may be found in water and sediment on and adjacent to this property and in soil at three surrounding properties.

All observations noted during field efforts were documented in accordance with SERAS SOP #4001, *Logbook Documentation*. A summary of the analytical results for lead may be found in Table 1. Results for soil may also be found in Figure 5, for sediment in Figure 4, and for water in Figure 3. XRF screening results are located in Appendix C and the remaining analytical data for metals in Appendix G.

Soil cores were collected to depths of 8-feet bgs throughout three properties surrounding 2015 Richmond Terrace. Elevated lead levels greater than the project action limit of 800mg/kg lead in soil were found in many of the soil cores and at varying depths. Lead was even found in the percent concentration level at several locations, particularly the deeper part of the cores at JWL-Soil 7 and JWL-Soil8. A large percentage of the cores at 1983 Richmond Terrace contained lead concentrations above the project action limit. The three cores on the eastern portion of this property had much lower lead levels, in general as

can be seen in Table 1 and Figure 5 did not exceed this level. Location JWL-Soil3 does contain lead levels above the project action limit at depth greater than 5-feet bgs. The majority of the other cores on this property, with the exception of JWL-Soil13 on the western border, contain elevated lead levels at most sampling intervals with few exceptions. The highest lead level found was greater than 4% at JWL-Soil7G (6-7 feet bgs). Cores from the two smaller properties (2035 and 2037 Richmond Terrace) northwest of the original site contained much less lead. Although a few intervals were above the project action limit, the majority of the intervals from each core did not exceed this level.

The soil logs indicate that much of the area investigated is fill material. This fill was placed on marshlands that originally existed at the boundary between Staten Island and the Kill Van Kull.

Note that the current effort focused on lead. Contaminants other than metals were not analyzed in the soil, sediment and water samples that were collected as part of this investigation.

Elevated lead levels greater than the project action limit of 31 mg/kg lead in sediment were also observed in three of the four sediment cores and at all depths down to 8-feet below sediment surface. Logs of the cores may be found in Appendix H. The sediment deposits appear to be natural except for some fill close to the bulkhead. Location JWL-SED4 was relatively clean compared to the other three locations. This may have to do with the way the water currents move in and out of this area but it is unknown why there is such a large difference in lead concentration compared to the other cores. The elevated sediment lead levels may possibly be of concern to organisms living in the Kill Van Kull.

Water samples were collected at four locations and from three depths at each of those four locations within the Kill Van Kull, parallel to the edge of the bulkhead. At high tide the samples were collected from the top, bottom (just above the sediment) and middle of the water column. None of the water samples collected in the Kill Van Kull exceeded the project action limit of 50 µg/L lead in water.

Four wells at 2015 Richmond Terrace were sampled at both high and low tide. Filtered and unfiltered samples were analyzed from each well and at each tidal level. None of the filtered samples exceeded the project action limit of 50 µg/L lead in water. Five of the unfiltered samples exceeded the project action limit. The highest concentration of lead found was 280 µg/L in unfiltered samples collected from well "MSC-3" during high tide. None of the water samples from well MSC-4 exceeded the project action limit. It appears that any lead in the well water is bound to sediment particles and not dissolved in the water. A soil sample was collected at the water table at each of the three newly installed wells MSC3, MSC4, and MSC 5 (see Table). Lead in these three soil samples was found to be 29,000, 2500, and 21,000 mg/kg respectively. The location of well MSC-4 had less overall lead in the soil than the other two wells installed and this is reflected in the lead concentration of the unfiltered water sample from this well. It is also apparent that groundwater in the area of the wells is closely tied with water in the Kill Van Kull. Transducer data indicated that water levels in the wells and in the Kill Van Kull followed the same pattern (Appendix E). In addition, *in situ* analysis of groundwater within on-site wells indicated elevated levels of sodium (Table). This salinity would be unlikely if the groundwater originated inland.

Summary

The current investigation has found elevated lead levels in soil on one of the three properties as well as elevated lead levels in offshore sediment. All water samples generally had lead concentrations below the project action limit with the exception of some unfiltered water samples from on-site wells. After filtering, lead levels dropped below the detectable limit in the water. GPS coordinates of the sampling locations may be found in Appendix I.

Sediment offshore of 2015 Richmond Terrace, within the Kill Van Kull and approximately north of the original site contained elevated lead concentrations above the project action limit of 31 mg/kg in three of the four sediment cores collected to a depth of 8-feet below sediment surface and at one interval in the remaining core. The highest lead concentration in sediment was found at JWL-SED5-D (2-3 feet below

the sediment surface) at 29,000 mg/kg lead, but this location was an anomaly. The majority of the sediment samples contained lead levels less than 3000 mg/kg.

Water samples from the property and from the Kill Van Kull did not contain appreciable dissolved lead although unfiltered samples from the wells did contain lead above the project action limit. This lead was most likely bound to sediment as filtering reduced the lead concentration in the water to an acceptable level.

Overall, this sampling effort discovered elevated lead levels at several soil locations. Lead levels were elevated even at the greatest depths sampled (8-feet bgs) and did not, in general, appear to be linked with any particular depth. Elevated soil lead was found primarily at the 1983 Richmond Terrace property. The eastern border of the 1983 Richmond Terrace property does not appear to not have the elevated lead levels found throughout the rest of the property. This eastern border happens to be the furthest distance from the original Jewett White Lead Site. The other two properties, 2035 and 2037 Richmond Terrace, with a few exceptions did not have soil lead levels above the project action limit.

REFERENCES

U.S. EPA/ERT. 1991. Quality Assurance Technical Information Bulletin, "Field-Portable X-Ray Fluorescence", Volume 1, Number 4.

CC: Central Files- WA # SERAS-138 (w/attachments)
Electronic File- I:\Arhive\SERAS138\DR\121511
Dennis Miller, SERAS Program Manager (cover page only)

Table 1
Jewett White Lead, Staten Island, NY - Pb Results for 7/18/2011 to 9/13/2011 Samples

Sample #	Location	Sample Date	Latitude	Longitude	Sample Depth (Feet)	Matrix	Analysis	Result	Units	Comments
Soil Boring Samples - XRF and ICP-AE Results										
138-071811-0001	JWL-Soil1-A	7/18/2011	40.639923	-74.12801	0-1	Soil	XRF	130	mg/kg	1983 Richmond Terrace
138-071811-0002	JWL-Soil1-B	7/18/2011	40.639923	-74.12801	1-2	Soil	XRF	60U	mg/kg	1983 Richmond Terrace
138-071811-0003	JWL-Soil2-A	7/18/2011	40.639781	-74.128018	0-1	Soil	XRF	280	mg/kg	1983 Richmond Terrace
138-071811-0004	JWL-Soil2-B	7/18/2011	40.639781	-74.128018	1-2	Soil	XRF	140	mg/kg	1983 Richmond Terrace
138-071811-0005	JWL-Soil2-C	7/18/2011	40.639781	-74.128018	2-3	Soil	C-109	130	mg/kg	1983 Richmond Terrace
138-071811-0005	JWL-Soil2-C	7/18/2011	40.639781	-74.128018	2-3	Soil	XRF	160	mg/kg	1983 Richmond Terrace
138-071811-0100	FD-1	7/18/2011	40.639781	-74.128018	2-3	Soil	C-109	140	mg/kg	1983 Richmond Terrace; field duplicate of JWL-Soil2-C
138-071811-0100	FD-1	7/18/2011	40.639781	-74.128018	2-3	Soil	XRF	160	mg/kg	1983 Richmond Terrace; field duplicate of JWL-Soil2-C
138-071811-0100	FD-1-DUP	7/18/2011	40.639781	-74.128018	2-3	Soil	XRF	200	mg/kg	1983 Richmond Terrace; field duplicate of JWL-Soil2-C
138-071811-0006	JWL-Soil2-D	7/18/2011	40.639781	-74.128018	3-4	Soil	XRF	160	mg/kg	1983 Richmond Terrace
138-071811-0007	JWL-Soil2-E	7/18/2011	40.639781	-74.128018	4-5	Soil	XRF	190	mg/kg	1983 Richmond Terrace
138-071811-0008	JWL-Soil2-F	7/18/2011	40.639781	-74.128018	5-6	Soil	XRF	210	mg/kg	1983 Richmond Terrace
138-071811-0009	JWL-Soil2-G	7/18/2011	40.639781	-74.128018	6-7	Soil	XRF	160	mg/kg	1983 Richmond Terrace
138-071811-0010	JWL-Soil2-H	7/18/2011	40.639781	-74.128018	7-8	Soil	C-109	170	mg/kg	1983 Richmond Terrace
138-071811-0010	JWL-Soil2-H	7/18/2011	40.639781	-74.128018	7-8	Soil	XRF	210	mg/kg	1983 Richmond Terrace
138-071811-0011	JWL-Soil3	7/18/2011	40.639466	-74.127999	0-0.25	Soil	C-109	280	mg/kg	1983 Richmond Terrace; 0-3 inch grab sample
138-071811-0011	JWL-Soil3	7/18/2011	40.639466	-74.127999	0-0.25	Soil	XRF	250	mg/kg	1983 Richmond Terrace; 0-3 inch grab sample
138-071811-0012	JWL-Soil3-A	7/18/2011	40.639466	-74.127999	0-1	Soil	XRF	280	mg/kg	1983 Richmond Terrace
138-071811-0013	JWL-Soil3-B	7/18/2011	40.639466	-74.127999	1-2	Soil	XRF	140	mg/kg	1983 Richmond Terrace
138-071811-0013	JWL-Soil3-B-DUP	7/18/2011	40.639466	-74.127999	1-2	Soil	XRF	160	mg/kg	1983 Richmond Terrace
138-071811-0014	JWL-Soil3-C	7/18/2011	40.639466	-74.127999	2-3	Soil	XRF	91	mg/kg	1983 Richmond Terrace
138-071811-0015	JWL-Soil3-D	7/18/2011	40.639466	-74.127999	3-4	Soil	XRF	120	mg/kg	1983 Richmond Terrace
138-071811-0016	JWL-Soil3-E	7/18/2011	40.639466	-74.127999	4-5	Soil	C-109	190	mg/kg	1983 Richmond Terrace
138-071811-0016	JWL-Soil3-E	7/18/2011	40.639466	-74.127999	4-5	Soil	XRF	230	mg/kg	1983 Richmond Terrace
138-071811-0017	JWL-Soil3-F	7/18/2011	40.639466	-74.127999	5-6	Soil	XRF	4100	mg/kg	1983 Richmond Terrace
138-071811-0018	JWL-Soil3-G	7/18/2011	40.639466	-74.127999	6-7	Soil	XRF	850	mg/kg	1983 Richmond Terrace
138-071811-0019	JWL-Soil3-H	7/18/2011	40.639466	-74.127999	7-8	Soil	XRF	2200	mg/kg	1983 Richmond Terrace
138-071811-0020	JWL-Soil4-A	7/18/2011	40.639983	-74.128449	0-1	Soil	XRF	250	mg/kg	1983 Richmond Terrace
138-071811-0021	JWL-Soil4-B	7/18/2011	40.639983	-74.128449	1-2	Soil	C-109	2400	mg/kg	1983 Richmond Terrace
138-071811-0021	JWL-Soil4-B	7/18/2011	40.639983	-74.128449	1-2	Soil	XRF	520	mg/kg	1983 Richmond Terrace
138-071811-0022	JWL-Soil4-C	7/18/2011	40.639983	-74.128449	2-3	Soil	XRF	4200	mg/kg	1983 Richmond Terrace
138-071811-0023	JWL-Soil4-D	7/18/2011	40.639983	-74.128449	3-4	Soil	XRF	9200	mg/kg	1983 Richmond Terrace
138-071811-0024	JWL-Soil4-E	7/18/2011	40.639983	-74.128449	4-5	Soil	XRF	4400	mg/kg	1983 Richmond Terrace
138-071811-0025	JWL-Soil4-F	7/18/2011	40.639983	-74.128449	5-6	Soil	XRF	15000	mg/kg	1983 Richmond Terrace
138-071811-0025	JWL-Soil4-F-DUP	7/18/2011	40.639983	-74.128449	5-6	Soil	XRF	16000	mg/kg	1983 Richmond Terrace
138-071811-0026	JWL-Soil4-G	7/18/2011	40.639983	-74.128449	6-7	Soil	C-109	4600	mg/kg	1983 Richmond Terrace
138-071811-0026	JWL-Soil4-G	7/18/2011	40.639983	-74.128449	6-7	Soil	XRF	5600	mg/kg	1983 Richmond Terrace
138-071811-0027	JWL-Soil4-H	7/18/2011	40.639983	-74.128449	7-8	Soil	XRF	480	mg/kg	1983 Richmond Terrace
138-071811-0028	JWL-Soil5-A	7/18/2011	40.639516	-74.128428	0-1	Soil	XRF	1500	mg/kg	1983 Richmond Terrace
138-071811-0029	JWL-Soil5-B	7/18/2011	40.639516	-74.128428	1-2	Soil	XRF	640	mg/kg	1983 Richmond Terrace

138-071811-0030	JWL-Soil5-C	7/18/2011	40.639516	-74.128428	2-3	Soil	XRF	270	mg/kg	1983 Richmond Terrace
138-071811-0031	JWL-Soil5-D	7/18/2011	40.639516	-74.128428	3-4	Soil	C-109	400	mg/kg	1983 Richmond Terrace
138-071811-0031	JWL-Soil5-D	7/18/2011	40.639516	-74.128428	3-4	Soil	XRF	410	mg/kg	1983 Richmond Terrace
138-071811-0032	JWL-Soil5-E	7/18/2011	40.639516	-74.128428	4-5	Soil	XRF	1400	mg/kg	1983 Richmond Terrace
138-071811-0033	JWL-Soil5-F	7/18/2011	40.639516	-74.128428	5-6	Soil	XRF	3700	mg/kg	1983 Richmond Terrace
138-071811-0034	JWL-Soil5-G	7/18/2011	40.639516	-74.128428	6-7	Soil	XRF	4700	mg/kg	1983 Richmond Terrace
138-071811-0035	JWL-Soil5-H	7/18/2011	40.639516	-74.128428	7-8	Soil	XRF	23000	mg/kg	1983 Richmond Terrace
138-071811-0036	JWL-Soil6-A	7/18/2011	40.639982	-74.128738	0-1	Soil	C-109	920	mg/kg	1983 Richmond Terrace
138-071811-0036	JWL-Soil6-A	7/18/2011	40.639982	-74.128738	0-1	Soil	XRF	530	mg/kg	1983 Richmond Terrace
138-071811-0037	JWL-Soil6-B	7/18/2011	40.639982	-74.128738	1-2	Soil	XRF	2600	mg/kg	1983 Richmond Terrace
138-071811-0038	JWL-Soil6-C	7/18/2011	40.639982	-74.128738	2-3	Soil	XRF	2400	mg/kg	1983 Richmond Terrace
138-071811-0038	JWL-Soil6-C-DU	7/18/2011	40.639982	-74.128738	2-3	Soil	XRF	2500	mg/kg	1983 Richmond Terrace
138-071811-0039	JWL-Soil6-D	7/18/2011	40.639982	-74.128738	3-4	Soil	XRF	2300	mg/kg	1983 Richmond Terrace
138-071811-0040	JWL-Soil6-E	7/18/2011	40.639982	-74.128738	4-5	Soil	XRF	4900	mg/kg	1983 Richmond Terrace
138-071811-0041	JWL-Soil6-F	7/18/2011	40.639982	-74.128738	5-6	Soil	C-109	28000	mg/kg	1983 Richmond Terrace
138-071811-0041	JWL-Soil6-F	7/18/2011	40.639982	-74.128738	5-6	Soil	XRF	35000	mg/kg	1983 Richmond Terrace
138-071811-0042	JWL-Soil6-G	7/18/2011	40.639982	-74.128738	6-7	Soil	XRF	8700	mg/kg	1983 Richmond Terrace
138-071811-0043	JWL-Soil6-H	7/18/2011	40.639982	-74.128738	7-8	Soil	XRF	1700	mg/kg	1983 Richmond Terrace
138-071811-0044	JWL-Soil7-A	7/18/2011	40.639842	-74.128751	0-1	Soil	XRF	170	mg/kg	1983 Richmond Terrace
138-071811-0045	JWL-Soil7-B	7/18/2011	40.639842	-74.128751	1-2	Soil	XRF	2700	mg/kg	1983 Richmond Terrace
138-071811-0046	JWL-Soil7-C	7/18/2011	40.639842	-74.128751	2-3	Soil	C-109	7500	mg/kg	1983 Richmond Terrace
138-071811-0046	JWL-Soil7-C	7/18/2011	40.639842	-74.128751	2-3	Soil	XRF	6500	mg/kg	1983 Richmond Terrace
138-071811-0046	JWL-Soil7-C-DU	7/18/2011	40.639842	-74.128751	2-3	Soil	XRF	6900	mg/kg	1983 Richmond Terrace
138-071811-0047	JWL-Soil7-D	7/18/2011	40.639842	-74.128751	3-4	Soil	XRF	8300	mg/kg	1983 Richmond Terrace
138-071811-0048	JWL-Soil7-E	7/18/2011	40.639842	-74.128751	4-5	Soil	XRF	11000	mg/kg	1983 Richmond Terrace
138-071811-0049	JWL-Soil7-F	7/18/2011	40.639842	-74.128751	5-6	Soil	XRF	25000	mg/kg	1983 Richmond Terrace
138-071811-0050	JWL-Soil7-G	7/18/2011	40.639842	-74.128751	6-7	Soil	XRF	43000	mg/kg	1983 Richmond Terrace
138-071811-0050	JWL-Soil7-G-DU	7/18/2011	40.639842	-74.128751	6-7	Soil	XRF	44000	mg/kg	1983 Richmond Terrace
138-071811-0051	JWL-Soil7-H	7/18/2011	40.639842	-74.128751	7-8	Soil	C-109	36000	mg/kg	1983 Richmond Terrace
138-071811-0051	JWL-Soil7-H	7/18/2011	40.639842	-74.128751	7-8	Soil	XRF	36000	mg/kg	1983 Richmond Terrace
138-071811-0052	JWL-Soil8-A	7/18/2011	40.639514	-74.128844	0-1	Soil	XRF	1800	mg/kg	1983 Richmond Terrace
138-071811-0053	JWL-Soil8-B	7/18/2011	40.639514	-74.128844	1-2	Soil	XRF	3600	mg/kg	1983 Richmond Terrace
138-071811-0054	JWL-Soil8-C	7/18/2011	40.639514	-74.128844	2-3	Soil	XRF	5700	mg/kg	1983 Richmond Terrace
138-071811-0055	JWL-Soil8-D	7/18/2011	40.639514	-74.128844	3-4	Soil	XRF	6300	mg/kg	1983 Richmond Terrace
138-071811-0056	JWL-Soil8-E	7/18/2011	40.639514	-74.128844	4-5	Soil	C-109	6200	mg/kg	1983 Richmond Terrace
138-071811-0056	JWL-Soil8-E	7/18/2011	40.639514	-74.128844	4-5	Soil	XRF	7600	mg/kg	1983 Richmond Terrace
138-071811-0057	JWL-Soil8-F	7/18/2011	40.639514	-74.128844	5-6	Soil	XRF	15000	mg/kg	1983 Richmond Terrace
138-071811-0058	JWL-Soil8-G	7/18/2011	40.639514	-74.128844	6-7	Soil	XRF	14000	mg/kg	1983 Richmond Terrace
138-071811-0059	JWL-Soil8-H	7/18/2011	40.639514	-74.128844	7-8	Soil	XRF	19000	mg/kg	1983 Richmond Terrace
138-071811-0060	JWL-Soil9-A	7/18/2011	40.640072	-74.129076	0-1	Soil	XRF	3200	mg/kg	1983 Richmond Terrace
138-071811-0061	JWL-Soil9-B	7/18/2011	40.640072	-74.129076	1-2	Soil	C-109	4600	mg/kg	1983 Richmond Terrace
138-071811-0061	JWL-Soil9-B	7/18/2011	40.640072	-74.129076	1-2	Soil	XRF	5800	mg/kg	1983 Richmond Terrace
138-071811-0062	JWL-Soil9-C	7/18/2011	40.640072	-74.129076	2-3	Soil	XRF	16000	mg/kg	1983 Richmond Terrace
138-071811-0063	JWL-Soil9-D	7/18/2011	40.640072	-74.129076	3-4	Soil	XRF	730	mg/kg	1983 Richmond Terrace
138-071811-0063	JWL-Soil9-D-DU	7/18/2011	40.640072	-74.129076	3-4	Soil	XRF	710	mg/kg	1983 Richmond Terrace
138-071811-0064	JWL-Soil9-E	7/18/2011	40.640072	-74.129076	4-5	Soil	XRF	18000	mg/kg	1983 Richmond Terrace
138-071811-0065	JWL-Soil9-F	7/18/2011	40.640072	-74.129076	5-6	Soil	XRF	1500	mg/kg	1983 Richmond Terrace
138-071811-0066	JWL-Soil9-G	7/18/2011	40.640072	-74.129076	6-7	Soil	C-109	430	mg/kg	1983 Richmond Terrace

138-071811-0066	JWL-Soil9-G	7/18/2011	40.640072	-74.129076	6-7	Soil	XRF	500	mg/kg	1983 Richmond Terrace
138-071811-0067	JWL-Soil9-H	7/18/2011	40.640072	-74.129076	7-8	Soil	XRF	970	mg/kg	1983 Richmond Terrace
138-071811-0068	JWL-Soil10-A	7/18/2011	40.639832	-74.129145	0-1	Soil	XRF	1400	mg/kg	1983 Richmond Terrace
138-071811-0069	JWL-Soil10-B	7/18/2011	40.639832	-74.129145	1-2	Soil	XRF	6000	mg/kg	1983 Richmond Terrace
138-071811-0070	JWL-Soil10-C	7/18/2011	40.639832	-74.129145	2-3	Soil	XRF	1300	mg/kg	1983 Richmond Terrace
138-071811-0071	JWL-Soil10-D	7/18/2011	40.639832	-74.129145	3-4	Soil	C-109	3200	mg/kg	1983 Richmond Terrace
138-071811-0071	JWL-Soil10-D	7/18/2011	40.639832	-74.129145	3-4	Soil	XRF	3600	mg/kg	1983 Richmond Terrace
138-071811-0072	JWL-Soil10-E	7/18/2011	40.639832	-74.129145	4-5	Soil	XRF	2200	mg/kg	1983 Richmond Terrace
138-071811-0073	JWL-Soil10-F	7/18/2011	40.639832	-74.129145	5-6	Soil	XRF	3900	mg/kg	1983 Richmond Terrace
138-071811-0074	JWL-Soil10-G	7/18/2011	40.639832	-74.129145	6-7	Soil	XRF	2400	mg/kg	1983 Richmond Terrace
138-071811-0075	JWL-Soil10-H	7/18/2011	40.639832	-74.129145	7-8	Soil	XRF	4600	mg/kg	1983 Richmond Terrace
138-071811-0075	JWL-Soil10-H-DU	7/18/2011	40.639832	-74.129145	7-8	Soil	XRF	4000	mg/kg	1983 Richmond Terrace
138-071811-0076	JWL-Soil11-A	7/18/2011	40.639507	-74.129202	0-1	Soil	C-109	1100	mg/kg	1983 Richmond Terrace
138-071811-0076	JWL-Soil11-A	7/18/2011	40.639507	-74.129202	0-1	Soil	XRF	1400	mg/kg	1983 Richmond Terrace
138-071811-0077	JWL-Soil11-B	7/18/2011	40.639507	-74.129202	1-2	Soil	XRF	2900	mg/kg	1983 Richmond Terrace
138-071811-0078	JWL-Soil11-C	7/18/2011	40.639507	-74.129202	2-3	Soil	XRF	12000	mg/kg	1983 Richmond Terrace
138-071811-0079	JWL-Soil11-D	7/18/2011	40.639507	-74.129202	3-4	Soil	XRF	5600	mg/kg	1983 Richmond Terrace
138-071811-0080	JWL-Soil11-E	7/18/2011	40.639507	-74.129202	4-5	Soil	C-109	4500	mg/kg	1983 Richmond Terrace
138-071811-0080	JWL-Soil11-E	7/18/2011	40.639507	-74.129202	4-5	Soil	XRF	6400	mg/kg	1983 Richmond Terrace
138-071811-0081	JWL-Soil11-F	7/18/2011	40.639507	-74.129202	5-6	Soil	XRF	6800	mg/kg	1983 Richmond Terrace
138-071811-0082	JWL-Soil11-G	7/18/2011	40.639507	-74.129202	6-7	Soil	XRF	8600	mg/kg	1983 Richmond Terrace
138-071811-0083	JWL-Soil11-H	7/18/2011	40.639507	-74.129202	7-8	Soil	XRF	5400	mg/kg	1983 Richmond Terrace
138-071811-0084	JWL-Soil12-A	7/18/2011	40.63984	-74.129394	0-1	Soil	XRF	300	mg/kg	1983 Richmond Terrace
138-071811-0085	JWL-Soil12-B	7/18/2011	40.63984	-74.129394	1-2	Soil	XRF	1600	mg/kg	1983 Richmond Terrace
138-071811-0086	JWL-Soil12-C	7/18/2011	40.63984	-74.129394	2-3	Soil	C-109	2200	mg/kg	1983 Richmond Terrace
138-071811-0086	JWL-Soil12-C	7/18/2011	40.63984	-74.129394	2-3	Soil	XRF	1900	mg/kg	1983 Richmond Terrace
138-071811-0087	JWL-Soil12-D	7/18/2011	40.63984	-74.129394	3-4	Soil	XRF	1600	mg/kg	1983 Richmond Terrace
138-071811-0087	JWL-Soil12-D-DU	7/18/2011	40.63984	-74.129394	3-4	Soil	XRF	1700	mg/kg	1983 Richmond Terrace
138-071811-0088	JWL-Soil12-E	7/18/2011	40.63984	-74.129394	4-5	Soil	XRF	2100	mg/kg	1983 Richmond Terrace
138-071811-0089	JWL-Soil12-F	7/18/2011	40.63984	-74.129394	5-6	Soil	XRF	1300	mg/kg	1983 Richmond Terrace
138-071811-0090	JWL-Soil12-G	7/18/2011	40.63984	-74.129394	6-7	Soil	C-109	310	mg/kg	1983 Richmond Terrace
138-071811-0090	JWL-Soil12-G	7/18/2011	40.63984	-74.129394	6-7	Soil	XRF	380	mg/kg	1983 Richmond Terrace
138-071811-0091	JWL-Soil12-H	7/18/2011	40.63984	-74.129394	7-8	Soil	XRF	540	mg/kg	1983 Richmond Terrace
138-071811-0092	JWL-Soil13-A	7/18/2011	40.63955	-74.12944	0-1	Soil	XRF	640	mg/kg	1983 Richmond Terrace
138-071811-0093	JWL-Soil13-B	7/18/2011	40.63955	-74.12944	1-2	Soil	XRF	11000	mg/kg	1983 Richmond Terrace
138-071811-0094	JWL-Soil13-C	7/18/2011	40.63955	-74.12944	2-3	Soil	XRF	600	mg/kg	1983 Richmond Terrace
138-071811-0095	JWL-Soil13-D	7/18/2011	40.63955	-74.12944	3-4	Soil	XRF	570	mg/kg	1983 Richmond Terrace
138-071811-0096	JWL-Soil13-E	7/18/2011	40.63955	-74.12944	4-5	Soil	C-109	990	mg/kg	1983 Richmond Terrace
138-071811-0096	JWL-Soil13-E	7/18/2011	40.63955	-74.12944	4-5	Soil	XRF	570	mg/kg	1983 Richmond Terrace
138-071811-0096	JWL-Soil13-E-DU	7/18/2011	40.63955	-74.12944	4-5	Soil	XRF	740	mg/kg	1983 Richmond Terrace
138-071811-0097	JWL-Soil13-F	7/18/2011	40.63955	-74.12944	5-6	Soil	XRF	580	mg/kg	1983 Richmond Terrace
138-071811-0098	JWL-Soil13-G	7/18/2011	40.63955	-74.12944	6-7	Soil	XRF	410	mg/kg	1983 Richmond Terrace
138-071811-0099	JWL-Soil13-H	7/18/2011	40.63955	-74.12944	7-8	Soil	XRF	66	mg/kg	1983 Richmond Terrace
138-080211-0001	JWL-Soil14-A	8/2/2011	40.6405332	-74.13049911	0-1	Soil	XRF	130	mg/kg	2035 Richmond Terrace
138-080211-0002	JWL-Soil14-B	8/2/2011	40.6405332	-74.13049911	1-2	Soil	XRF	65	mg/kg	2035 Richmond Terrace
138-080211-0003	JWL-Soil14-C	8/2/2011	40.6405332	-74.13049911	2-3	Soil	XRF	60U	mg/kg	2035 Richmond Terrace
138-080211-0004	JWL-Soil14-D	8/2/2011	40.6405332	-74.13049911	3-4	Soil	XRF	1300	mg/kg	2035 Richmond Terrace
138-080211-0005	JWL-Soil14-E	8/2/2011	40.6405332	-74.13049911	4-5	Soil	C-109	470	mg/kg	2035 Richmond Terrace

138-080211-0005	JWL-Soil14-E	8/2/2011	40.6405332	-74.13049911	4-5	Soil	XRF	400	mg/kg	2035 Richmond Terrace
138-080211-0041	FD-2	8/2/2011	40.6405332	-74.13049911	4-5	Soil	C-109	390	mg/kg	2035 Richmond Terrace; field duplicate of JWL-Soil14-E
138-080211-0041	FD-2	8/2/2011	40.6405332	-74.13049911	4-5	Soil	XRF	330	mg/kg	2035 Richmond Terrace; field duplicate of JWL-Soil14-E
138-080211-0006	JWL-Soil14-F	8/2/2011	40.6405332	-74.13049911	5-6	Soil	XRF	450	mg/kg	2035 Richmond Terrace
138-080211-0007	JWL-Soil14-G	8/2/2011	40.6405332	-74.13049911	6-7	Soil	XRF	90	mg/kg	2035 Richmond Terrace
138-080211-0008	JWL-Soil14-H	8/2/2011	40.6405332	-74.13049911	7-8	Soil	XRF	150	mg/kg	2035 Richmond Terrace
138-080211-0009	JWL-Soil15-A	8/2/2011	40.6403489	-74.13062131	0-1	Soil	XRF	1100	mg/kg	2035 Richmond Terrace
138-080211-0010	JWL-Soil15-B	8/2/2011	40.6403489	-74.13062131	1-2	Soil	C-109	1500	mg/kg	2035 Richmond Terrace
138-080211-0010	JWL-Soil15-B	8/2/2011	40.6403489	-74.13062131	1-2	Soil	XRF	1400	mg/kg	2035 Richmond Terrace
138-080211-0011	JWL-Soil15-C	8/2/2011	40.6403489	-74.13062131	2-3	Soil	XRF	880	mg/kg	2035 Richmond Terrace
138-080211-0012	JWL-Soil15-D	8/2/2011	40.6403489	-74.13062131	3-4	Soil	XRF	200	mg/kg	2035 Richmond Terrace
138-080211-0012	JWL-Soil15-D-DU	8/2/2011	40.6403489	-74.13062131	3-4	Soil	XRF	260	mg/kg	2035 Richmond Terrace
138-080211-0013	JWL-Soil15-E	8/2/2011	40.6403489	-74.13062131	4-5	Soil	XRF	290	mg/kg	2035 Richmond Terrace
138-080211-0014	JWL-Soil15-F	8/2/2011	40.6403489	-74.13062131	5-6	Soil	XRF	72	mg/kg	2035 Richmond Terrace
138-080211-0015	JWL-Soil15-G	8/2/2011	40.6403489	-74.13062131	6-7	Soil	C-109	42	mg/kg	2035 Richmond Terrace
138-080211-0015	JWL-Soil15-G	8/2/2011	40.6403489	-74.13062131	6-7	Soil	XRF	60U	mg/kg	2035 Richmond Terrace
138-080211-0016	JWL-Soil15-H	8/2/2011	40.6403489	-74.13062131	7-8	Soil	XRF	60U	mg/kg	2035 Richmond Terrace
138-080211-0017	JWL-Soil16-A	8/2/2011	40.6408153	-74.13085083	0-1	Soil	XRF	530	mg/kg	2037 Richmond Terrace
138-080211-0018	JWL-Soil16-B	8/2/2011	40.6408153	-74.13085083	1-2	Soil	XRF	800	mg/kg	2037 Richmond Terrace
138-080211-0019	JWL-Soil16-C	8/2/2011	40.6408153	-74.13085083	2-3	Soil	XRF	2200	mg/kg	2037 Richmond Terrace
138-080211-0020	JWL-Soil16-D	8/2/2011	40.6408153	-74.13085083	3-4	Soil	C-109	680	mg/kg	2037 Richmond Terrace
138-080211-0020	JWL-Soil16-D	8/2/2011	40.6408153	-74.13085083	3-4	Soil	XRF	720	mg/kg	2037 Richmond Terrace
138-080211-0021	JWL-Soil16-E	8/2/2011	40.6408153	-74.13085083	4-5	Soil	XRF	530	mg/kg	2037 Richmond Terrace
138-080211-0022	JWL-Soil16-F	8/2/2011	40.6408153	-74.13085083	5-6	Soil	XRF	590	mg/kg	2037 Richmond Terrace
138-080211-0023	JWL-Soil16-G	8/2/2011	40.6408153	-74.13085083	6-7	Soil	XRF	540	mg/kg	2037 Richmond Terrace
138-080211-0024	JWL-Soil16-H	8/2/2011	40.6408153	-74.13085083	7-8	Soil	XRF	640	mg/kg	2037 Richmond Terrace
138-080211-0024	JWL-Soil16-H-DU	8/2/2011	40.6408153	-74.13085083	7-8	Soil	XRF	620	mg/kg	2037 Richmond Terrace
138-080211-0025	JWL-Soil17-A	8/2/2011	40.6406039	-74.13073578	0-1	Soil	C-109	330	mg/kg	2037 Richmond Terrace
138-080211-0025	JWL-Soil17-A	8/2/2011	40.6406039	-74.13073578	0-1	Soil	XRF	310	mg/kg	2037 Richmond Terrace
138-080211-0026	JWL-Soil17-B	8/2/2011	40.6406039	-74.13073578	1-2	Soil	XRF	260	mg/kg	2037 Richmond Terrace
138-080211-0027	JWL-Soil17-C	8/2/2011	40.6406039	-74.13073578	2-3	Soil	XRF	60U	mg/kg	2037 Richmond Terrace
138-080211-0028	JWL-Soil17-D	8/2/2011	40.6406039	-74.13073578	3-4	Soil	XRF	60U	mg/kg	2037 Richmond Terrace
138-080211-0029	JWL-Soil17-E	8/2/2011	40.6406039	-74.13073578	4-5	Soil	XRF	88	mg/kg	2037 Richmond Terrace
138-080211-0030	JWL-Soil17-F	8/2/2011	40.6406039	-74.13073578	5-6	Soil	C-109	26	mg/kg	2037 Richmond Terrace
138-080211-0030	JWL-Soil17-F	8/2/2011	40.6406039	-74.13073578	5-6	Soil	XRF	60U	mg/kg	2037 Richmond Terrace
138-080211-0031	JWL-Soil17-G	8/2/2011	40.6406039	-74.13073578	6-7	Soil	XRF	60U	mg/kg	2037 Richmond Terrace
138-080211-0032	JWL-Soil17-H	8/2/2011	40.6406039	-74.13073578	7-8	Soil	XRF	60U	mg/kg	2037 Richmond Terrace
138-080211-0033	JWL-Soil18-A	8/2/2011	40.6408224	-74.13107432	0-1	Soil	XRF	3000	mg/kg	2037 Richmond Terrace
138-080211-0034	JWL-Soil18-B	8/2/2011	40.6408224	-74.13107432	1-2	Soil	XRF	730	mg/kg	2037 Richmond Terrace
138-080211-0035	JWL-Soil18-C	8/2/2011	40.6408224	-74.13107432	2-3	Soil	C-109	18	mg/kg	2037 Richmond Terrace
138-080211-0035	JWL-Soil18-C	8/2/2011	40.6408224	-74.13107432	2-3	Soil	XRF	60U	mg/kg	2037 Richmond Terrace
138-080211-0035	WL-Soil18-C-DU	8/2/2011	40.6408224	-74.13107432	2-3	Soil	XRF	60U	mg/kg	2037 Richmond Terrace
138-080211-0036	JWL-Soil18-D	8/2/2011	40.6408224	-74.13107432	3-4	Soil	XRF	82	mg/kg	2037 Richmond Terrace
138-080211-0037	JWL-Soil18-E	8/2/2011	40.6408224	-74.13107432	4-5	Soil	XRF	190	mg/kg	2037 Richmond Terrace
138-080211-0037	WL-Soil18-E-DU	8/2/2011	40.6408224	-74.13107432	4-5	Soil	XRF	220	mg/kg	2037 Richmond Terrace
138-080211-0038	JWL-Soil18-F	8/2/2011	40.6408224	-74.13107432	5-6	Soil	XRF	99	mg/kg	2037 Richmond Terrace
138-080211-0039	JWL-Soil18-G	8/2/2011	40.6408224	-74.13107432	6-7	Soil	XRF	93	mg/kg	2037 Richmond Terrace
138-080211-0040	JWL-Soil18-H	8/2/2011	40.6408224	-74.13107432	7-8	Soil	C-109	49	mg/kg	2037 Richmond Terrace

138-080211-0040	JWL-Soil18-H	8/2/2011	40.6408224	-74.13107432	7-8	Soil	XRF	65	mg/kg	2037 Richmond Terrace
Ground Water Samples and Well-Installation Soil Samples										
138-081011-0032	JWL-Well1-HT-U	9/13/2011	40.640533	-74.129986	NA	Aqueous	C-109	75	ug/L	2015 Richmond Terrace; high tide, total metals
138-081011-0031	JWL-Well1-HT-F	9/13/2011	40.640533	-74.129986	NA	Aqueous	C-109	8U	ug/L	2015 Richmond Terrace; high tide, dissolved metals
138-081011-0040	JWL-Well1-LT-U	9/13/2011	40.640533	-74.129986	NA	Aqueous	C-109	40	ug/L	2015 Richmond Terrace; low tide, total metals
138-081011-0039	JWL-Well1-LT-F	9/13/2011	40.640533	-74.129986	NA	Aqueous	C-109	8U	ug/L	2015 Richmond Terrace; low tide, dissolved metals
138-081111-0001	JWL-Well3-Soil	8/11/2011	40.640456	-74.129821	3-5	Soil	C-109	29000	mg/kg	2015 Richmond Terrace; collected at water table
138-081011-0034	JWL-Well3-HT-U	9/13/2011	40.640456	-74.129821	NA	Aqueous	C-109	280	ug/L	2015 Richmond Terrace; high tide, total metals
138-081011-0033	JWL-Well3-HT-F	9/13/2011	40.640456	-74.129821	NA	Aqueous	C-109	27	ug/L	2015 Richmond Terrace; high tide, dissolved metals
138-081011-0042	JWL-Well3-LT-U	9/13/2011	40.640456	-74.129821	NA	Aqueous	C-109	150	ug/L	2015 Richmond Terrace; low tide, total metals
138-081011-0041	JWL-Well3-LT-F	9/13/2011	40.640456	-74.129821	NA	Aqueous	C-109	8U	ug/L	2015 Richmond Terrace; low tide, dissolved metals
138-081111-0002	JWL-Well4-Soil	8/11/2011	40.640329	-74.129577	6-8	Soil	C-109	2500	mg/kg	2015 Richmond Terrace; collected at water table
138-081011-0036	JWL-Well4-HT-U	9/13/2011	40.640329	-74.129577	NA	Aqueous	C-109	8U	ug/L	2015 Richmond Terrace; high tide, total metals
138-081011-0050	FD-7	9/13/2011	40.640329	-74.129577	NA	Aqueous	C-109	8U	ug/L	2015 Richmond Terrace; field duplicate of JWL-Well4-HT-UF
138-081011-0035	JWL-Well4-HT-F	9/13/2011	40.640329	-74.129577	NA	Aqueous	C-109	8U	ug/L	2015 Richmond Terrace; high tide, dissolved metals
138-081011-0051	FD-8	9/13/2011	40.640329	-74.129577	NA	Aqueous	C-109	8U	ug/L	2015 Richmond Terrace; field duplicate of JWL-Well4-HT-F
138-081011-0044	JWL-Well4-LT-U	9/13/2011	40.640329	-74.129577	NA	Aqueous	C-109	30	ug/L	2015 Richmond Terrace; low tide, total metals
138-081011-0043	JWL-Well4-LT-F	9/13/2011	40.640329	-74.129577	NA	Aqueous	C-109	8U	ug/L	2015 Richmond Terrace; low tide, dissolved metals
138-081011-0001	JWL-Well5-Soil	8/10/2011	40.640197	-74.12935	4-6	Soil	C-109	21000	mg/kg	2015 Richmond Terrace; collected at water table
138-081011-0038	JWL-Well5-HT-U	9/13/2011	40.640197	-74.12935	NA	Aqueous	C-109	140	ug/L	2015 Richmond Terrace; high tide, total metals
138-081011-0037	JWL-Well5-HT-F	9/13/2011	40.640197	-74.12935	NA	Aqueous	C-109	17	ug/L	2015 Richmond Terrace; high tide, dissolved metals
138-081011-0046	JWL-Well5-LT-U	9/13/2011	40.640197	-74.12935	NA	Aqueous	C-109	120	ug/L	2015 Richmond Terrace; low tide, total metals
138-081011-0045	JWL-Well5-LT-F	9/13/2011	40.640197	-74.12935	NA	Aqueous	C-109	8U	ug/L	2015 Richmond Terrace; low tide, dissolved metals
Kill Van Kull Surface Water Samples										
138-081011-0022	JWL-KVK1-TOP-U	8/10/2011	40.640608	-74.129914	0	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; top of water column, total metals
138-081011-0023	JWL-KVK1-TOP-F	8/10/2011	40.640608	-74.129914	0	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; top of water column, dissolved metals
138-081011-0024	JWL-KVK1-MID-L	8/10/2011	40.640608	-74.129914	5.75	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; middle of water column, total metals
138-081011-0025	JWL-KVK1-MID-U	8/10/2011	40.640608	-74.129914	5.75	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; middle of water column, dissolved metals
138-081011-0026	JWL-KVK1-BOT-U	8/10/2011	40.640608	-74.129914	11.5	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; bottom of water column, total metals
138-081011-0027	JWL-KVK1-BOT-F	8/10/2011	40.640608	-74.129914	11.5	Aqueous	C-109	45	ug/L	2015 Richmond Terrace; bottom of water column, dissolved metals
138-081011-0016	JWL-KVK2-TOP-U	8/10/2011	40.640508	-74.12974	0	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; top of water column, total metals
138-081011-0017	JWL-KVK2-TOP-F	8/10/2011	40.640508	-74.12974	0	Aqueous	C-109	8U	ug/L	2015 Richmond Terrace; top of water column, dissolved metals
138-081011-0018	JWL-KVK2-MID-L	8/10/2011	40.640508	-74.12974	7	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; middle of water column, total metals
138-081011-0019	JWL-KVK2-MID-U	8/10/2011	40.640508	-74.12974	7	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; middle of water column, dissolved metals
138-081011-0020	JWL-KVK2-BOT-U	8/10/2011	40.640508	-74.12974	14	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; bottom of water column, total metals
138-081011-0021	JWL-KVK2-BOT-F	8/10/2011	40.640508	-74.12974	14	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; bottom of water column, dissolved metals
138-081011-0008	JWL-KVK3-TOP-U	8/10/2011	40.640407	-74.129506	0	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; top of water column, total metals
138-081011-0010	JWL-KVK3-TOP-F	8/10/2011	40.640407	-74.129506	0	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; field duplicate of JWL-KVK3-TOP-UF
138-081011-0009	JWL-KVK3-TOP-L	8/10/2011	40.640407	-74.129506	0	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; top of water column, dissolved metals
138-081011-0011	JWL-KVK3-TOP-FD	8/10/2011	40.640407	-74.129506	0	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; field duplicate of JWL-KVK3-TOP-F
138-081011-0012	JWL-KVK3-MID-L	8/10/2011	40.640407	-74.129506	8.5	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; middle of water column, total metals
138-081011-0013	JWL-KVK3-MID-U	8/10/2011	40.640407	-74.129506	8.5	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; middle of water column, dissolved metals
138-081011-0014	JWL-KVK3-BOT-U	8/10/2011	40.640407	-74.129506	17	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; bottom of water column, total metals
138-081011-0015	JWL-KVK3-BOT-F	8/10/2011	40.640407	-74.129506	17	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; bottom of water column, dissolved metals
138-081011-0002	JWL-KVK4-TOP-U	8/10/2011	40.640314	-74.129289	0	Aqueous	C-109	8U	ug/L	2015 Richmond Terrace; top of water column, total metals
138-081011-0003	JWL-KVK4-TOP-F	8/10/2011	40.640314	-74.129289	0	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; top of water column, dissolved metals
138-081011-0004	JWL-KVK4-MID-L	8/10/2011	40.640314	-74.129289	3.5	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; middle of water column, total metals
138-081011-0005	JWL-KVK4-MID-F	8/10/2011	40.640314	-74.129289	3.5	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; middle of water column, dissolved metals

138-081011-0006	WL-KVK4-BOT-U	8/10/2011	40.640314	-74.129289	7	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; bottom of water column, total metals
138-081011-0007	WL-KVK4-BOT-I	8/10/2011	40.640314	-74.129289	7	Aqueous	C-109	16U	ug/L	2015 Richmond Terrace; bottom of water column, dissolved metals

Kill Van Kull Sediment Core Samples

138-081111-0003	JWL-SED1-A	9/13/2011	40.640728	-74.129778	0-0.5	Sediment	C-109	1800	mg/kg	2015 Richmond Terrace
138-081111-0057	FD-5	9/13/2011	40.640728	-74.129778	0-0.5	Sediment	C-109	1700	mg/kg	2015 Richmond Terrace; field duplicate of JWL-SED1-A
138-081111-0004	JWL-SED1-B	9/13/2011	40.640728	-74.129778	0.5-1	Sediment	C-109	1500	mg/kg	2015 Richmond Terrace
138-081111-0005	JWL-SED1-C	9/13/2011	40.640728	-74.129778	1-2	Sediment	C-109	1600	mg/kg	2015 Richmond Terrace
138-081111-0006	JWL-SED1-D	9/13/2011	40.640728	-74.129778	2-3	Sediment	C-109	1400	mg/kg	2015 Richmond Terrace
138-081111-0007	JWL-SED1-E	9/13/2011	40.640728	-74.129778	3-4	Sediment	C-109	1500	mg/kg	2015 Richmond Terrace
138-081111-0008	JWL-SED1-F	9/13/2011	40.640728	-74.129778	4-5	Sediment	C-109	1100	mg/kg	2015 Richmond Terrace
138-081111-0058	FD-6	9/13/2011	40.640728	-74.129778	4-5	Sediment	C-109	1400	mg/kg	2015 Richmond Terrace; field duplicate of JWL-SED1-F
138-081111-0009	JWL-SED1-G	9/13/2011	40.640728	-74.129778	5-6	Sediment	C-109	380	mg/kg	2015 Richmond Terrace
138-081111-0010	JWL-SED1-H	9/13/2011	40.640728	-74.129778	6-7	Sediment	C-109	480	mg/kg	2015 Richmond Terrace
138-081111-0011	JWL-SED1-I	9/13/2011	40.640728	-74.129778	7-8	Sediment	C-109	320	mg/kg	2015 Richmond Terrace
138-081111-0030	JWL-SED4-A	9/13/2011	40.64088	-74.129556	0-0.5	Sediment	C-109	6.5	mg/kg	2015 Richmond Terrace
138-081111-0031	JWL-SED4-B	9/13/2011	40.64088	-74.129556	0.5-1	Sediment	C-109	45	mg/kg	2015 Richmond Terrace
138-081111-0032	JWL-SED4-C	9/13/2011	40.64088	-74.129556	1-2	Sediment	C-109	5.9	mg/kg	2015 Richmond Terrace
138-081111-0033	JWL-SED4-D	9/13/2011	40.64088	-74.129556	2-3	Sediment	C-109	8.4	mg/kg	2015 Richmond Terrace
138-081111-0034	JWL-SED4-E	9/13/2011	40.64088	-74.129556	3-4	Sediment	C-109	5.6	mg/kg	2015 Richmond Terrace
138-081111-0035	JWL-SED4-F	9/13/2011	40.64088	-74.129556	4-5	Sediment	C-109	2.9	mg/kg	2015 Richmond Terrace
138-081111-0036	JWL-SED4-G	9/13/2011	40.64088	-74.129556	5-6	Sediment	C-109	2.9	mg/kg	2015 Richmond Terrace
138-081111-0037	JWL-SED4-H	9/13/2011	40.64088	-74.129556	6-7	Sediment	C-109	2.5	mg/kg	2015 Richmond Terrace
138-081111-0038	JWL-SED4-I	9/13/2011	40.64088	-74.129556	7-8	Sediment	C-109	4.3	mg/kg	2015 Richmond Terrace
138-081111-0039	JWL-SED5-A	9/13/2011	40.640772	-74.12927	0-0.5	Sediment	C-109	2900	mg/kg	2015 Richmond Terrace
138-081111-0040	JWL-SED5-B	9/13/2011	40.640772	-74.12927	0.5-1	Sediment	C-109	2700	mg/kg	2015 Richmond Terrace
138-081111-0041	JWL-SED5-C	9/13/2011	40.640772	-74.12927	1-2	Sediment	C-109	4700	mg/kg	2015 Richmond Terrace
138-081111-0042	JWL-SED5-D	9/13/2011	40.640772	-74.12927	2-3	Sediment	C-109	29000	mg/kg	2015 Richmond Terrace
138-081111-0043	JWL-SED5-E	9/13/2011	40.640772	-74.12927	3-4	Sediment	C-109	2100	mg/kg	2015 Richmond Terrace
138-081111-0044	JWL-SED5-F	9/13/2011	40.640772	-74.12927	4-5	Sediment	C-109	2600	mg/kg	2015 Richmond Terrace
138-081111-0045	JWL-SED5-G	9/13/2011	40.640772	-74.12927	5-6	Sediment	C-109	1500	mg/kg	2015 Richmond Terrace
138-081111-0046	JWL-SED5-H	9/13/2011	40.640772	-74.12927	6-7	Sediment	C-109	1300	mg/kg	2015 Richmond Terrace
138-081111-0047	JWL-SED5-I	9/13/2011	40.640772	-74.12927	7-8	Sediment	C-109	1400	mg/kg	2015 Richmond Terrace
138-081111-0048	JWL-SED6-A	9/13/2011	40.641082	-74.129303	0-0.5	Sediment	C-109	870	mg/kg	2015 Richmond Terrace
138-081111-0049	JWL-SED6-B	9/13/2011	40.641082	-74.129303	0.5-1	Sediment	C-109	680	mg/kg	2015 Richmond Terrace
138-081111-0050	JWL-SED6-C	9/13/2011	40.641082	-74.129303	1-2	Sediment	C-109	820	mg/kg	2015 Richmond Terrace
138-081111-0051	JWL-SED6-D	9/13/2011	40.641082	-74.129303	2-3	Sediment	C-109	800	mg/kg	2015 Richmond Terrace
138-081111-0052	JWL-SED6-E	9/13/2011	40.641082	-74.129303	3-4	Sediment	C-109	700	mg/kg	2015 Richmond Terrace
138-081111-0053	JWL-SED6-F	9/13/2011	40.641082	-74.129303	4-5	Sediment	C-109	780	mg/kg	2015 Richmond Terrace
138-081111-0054	JWL-SED6-G	9/13/2011	40.641082	-74.129303	5-6	Sediment	C-109	940	mg/kg	2015 Richmond Terrace
138-081111-0055	JWL-SED6-H	9/13/2011	40.641082	-74.129303	6-7	Sediment	C-109	1300	mg/kg	2015 Richmond Terrace
138-081111-0056	JWL-SED6-I	9/13/2011	40.641082	-74.129303	7-8	Sediment	C-109	1400	mg/kg	2015 Richmond Terrace

exceeds project action limit specified in QAPP; 800 mg/kg soils, 31 mg/kg sediments, 50 ug/L aqueous

Jewett White Lead, Staten Island, NY - TAL Metals and Hg Results for 7/18/2011 to 9/13/2011 Samples																														
Sample #	Location	Matrix	Sample Date	Units	Latitude	Longitude	Sample Depth (Feet)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Mercury
Soil Boring Samples																														
138-071811-0005	JWL-Soil2-C	Soil	7/18/2011	mg/kg	40.639781	-74.128018	2-3	6000	1.9U	5.6	64	0.35	0.28U	2000	35	21	37	19000	130	12000	450	260	870	1.9U	0.46U	410	1.9U	22	110	
138-071811-0100	FD-1		7/18/2011	mg/kg	40.639781	-74.128018	2-3	6400	1.7U	6.3	68	0.34	0.25U	1900	47	25	39	22000	140	17000	400	350	850	1.7U	0.42U	460	1.7U	24	120	
138-071811-0010	JWL-Soil2-H	Soil	7/18/2011	mg/kg	40.639781	-74.128018	7-8	5800	1.9U	7.5	67	0.34	0.3	1200	62	34	50	25000	170	20000	200	490	880	1.9U	0.46U	860	1.9U	24	150	
138-071811-0011	JWL-Soil2-I	Soil	7/18/2011	mg/kg	40.639781	-74.128018	8-9	6500	4.8	34	110	0.88	0.62	2000	66	22	50	51000	180	28000	430	150	1500	1.6U	0.42U	1100	1.6U	25	910	
138-071811-0016	JWL-Soil2-E	Soil	7/18/2011	mg/kg	40.639781	-74.128018	9-10	1200	1.4U	6.3	200	0.31	0.29	33	111	11	120	1000	190	1000	100	100	440	1.8U	0.42U	240	4.5U	24	450	
138-071811-0021	JWL-Soil2-B	Soil	7/18/2011	mg/kg	40.639883	-74.128449	1-2	3200	360	14	110	1.2	1.2	46000	48	23	860	54000	2400	28000	370	150	410	1.9U	0.5	590	1.9U	26	610	
138-071811-0026	JWL-Soil4-G	Soil	7/18/2011	mg/kg	40.639883	-74.128449	6-7	4700	17	56	240	0.27U	2	13000	31	51	2900	95000	4600	3600	810	73	900	1.8U	0.5	3600	1.8U	27	800	
138-071811-0031	JWL-Soil5-D	Soil	7/18/2011	mg/kg	40.639516	-74.12828	3-4	4700	1.8U	6.3	71	0.32	0.33	5400	14	4.6	48	12000	400	4700	26	15	1300	1.8U	0.44U	280	1.8U	26	130	
138-071811-0036	JWL-Soil4-A	Soil	7/18/2011	mg/kg	40.639882	-74.128738	0-1	7900	5.8	7.6	210	0.46	100	34	880	63000	920	43000	560	300	3000	1.8U	0.45U	3000	1.8U	26	1700			
138-071811-0041	JWL-Soil5-F	Soil	7/18/2011	mg/kg	40.639882	-74.128738	5-6	1700	3.8	5.3	150	0.27U	1.3	16000	9	9.2	240	25000	28000	1800	770	14	250	1.8U	0.7	1200	1.8U	10	270	
138-071811-0046	JWL-Soil5-H	Soil	7/18/2011	mg/kg	40.639882	-74.128738	7-8	1200	3.8	5.3	150	0.27U	1.3	16000	9	9.2	240	25000	28000	1800	770	14	250	1.8U	0.7	1200	1.8U	10	270	
138-071811-0051	JWL-Soil5-G	Soil	7/18/2011	mg/kg	40.639882	-74.128738	9-10	2500	2.1	2.5	2500	0.27U	1.3	16000	30	19000	320	1200	1000	1000	400	320	1800	1.8U	0.42U	1600	1.8U	23	780	
138-071811-0056	JWL-Soil7-H	Soil	7/18/2011	mg/kg	40.639882	-74.128738	7-8	1200	3.8	5.3	150	0.27U	1.3	16000	9	9.2	240	25000	28000	1800	770	14	250	1.8U	0.7	1200	1.8U	10	270	
138-071811-0061	JWL-Soil8-E	Soil	7/18/2011	mg/kg	40.639514	-74.128444	4-5	7400	27	17	140	0.37	0.8	19000	38	14	380	80000	6200	2000	430	22	680	1.6U	0.41U	2100	1.6U	22	310	
138-071811-0066	JWL-Soil9-B	Soil	7/18/2011	mg/kg	40.639883	-74.128449	1-2	3200	360	14	110	1.2	1.2	46000	48	23	860	54000	2400	28000	370	150	410	1.9U	0.5	590	1.9U	26	610	
138-071811-0071	JWL-Soil9-G	Soil	7/18/2011	mg/kg	40.639872	-74.129076	6-7	4800	1.8U	5.6	140	0.27U	22000	15	4.6	67	13000	430	2700	380	19	830	1.8U	0.45U	210	1.8U	20	120		
138-071811-0076	JWL-Soil10-D	Soil	7/18/2011	mg/kg	40.639832	-74.129145	3-4	2700	21	33	240	0.25U	2	2900	32	34	190	15000	3200	850	450	45	240	1.7U	0.42U	630	1.7U	35	950	
138-071811-0081	JWL-Soil11-A	Soil	7/18/2011	mg/kg	40.639507	-74.129202	0-1	6600	1.6U	5.6	71	0.25U	51000	26	5.6	69	19000	1100	8400	230	24	1600	1.6U	0.41U	1100	1.6U	20	140		
138-071811-0086	JWL-Soil11-E	Soil	7/18/2011	mg/kg	40.639507	-74.129202	1-2	6000	1.6U	5.6	71	0.25U	51000	26	5.6	69	19000	1100	8400	230	24	1600	1.6U	0.41U	1100	1.6U	20	140		
138-071811-0091	JWL-Soil11-F	Soil	7/18/2011	mg/kg	40.639507	-74.129202	2-3	6000	1.6U	5.6	71	0.25U	51000	26	5.6	69	19000	1100	8400	230	24	1600	1.6U	0.41U	1100	1.6U	20	140		
138-071811-0096	JWL-Soil11-G	Soil	7/18/2011	mg/kg	40.639507	-74.129202	3-4	6000	1.6U	5.6	71	0.25U	51000	26	5.6	69	19000	1100	8400	230	24	1600	1.6U	0.41U	1100	1.6U	20	140		
138-071811-0101	JWL-Soil11-H	Soil	7/18/2011	mg/kg	40.639507	-74.129202	4-5	6000	1.6U	5.6	71	0.25U	51000	26	5.6	69	19000	1100	8400	230	24	1600	1.6U	0.41U	1100	1.6U	20	140		
138-071811-0106	JWL-Soil11-I	Soil	7/18/2011	mg/kg	40.639507	-74.129202	5-6	6000	1.6U	5.6	71	0.25U	51000	26	5.6	69	19000	1100	8400	230	24	1600	1.6U	0.41U	1100	1.6U	20	140		
138-071811-0111	JWL-Soil11-J	Soil	7/18/2011	mg/kg	40.639507	-74.129202																								



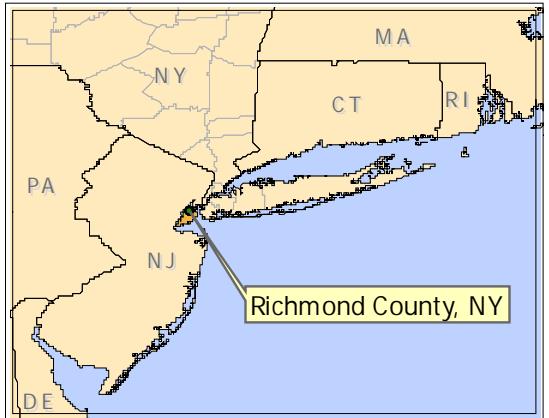
Map created using 2007 color orthophotography from NJGIN
and Site Survey GPS Data

Map Creation Date: August 2011

Coordinate system: New York State Plane
FIPS: 3104
Datum: NAD83
Units: Feet

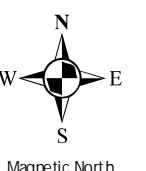
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MXD file: g:\arcinfo\projects\SERAS01\SER00138_JewettWhiteLead\138_Site_Sampling_Location_Fig1

120 0 120
Feet



Legend

- Vibracore Sample
- Existing Monitor Well
- June 2011 Sampling
- ▲ Soil Sample Location
- - - Property Line



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W.A. # 0-138

Figure 1
Actual Site Sampling Locations
Jewett White Lead Site
Staten Island, New York



Figure 2
Installation of Monitoring Well MSC-5
at 2015 Richmond Terrace
Jewett White Lead Site
Staten Island, New York

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EP-W-09-031
W.A.# 0 - 138



Map created using 2007 color orthophotography from NJGIN
and Site Survey GPS Data

Map Creation Date: November 2011

Coordinate system: New York State Plane
FIPS: 3104
Datum: NAD83
Units: Feet

Data: g:\arcviewprojects\SERAS01\00-138
MXD file: g:\arcinfo\projects\SERAS01\SER00138_JewettWhiteLead\138_Water_Sample_F3

Legend

● Water Samples

U = Below Analytical Detection Limit

Concentration > Project Action Limit
of 50 ug/L Lead in Water

50

0

50

Feet



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EP-W-09-031
W.A.# 0-138

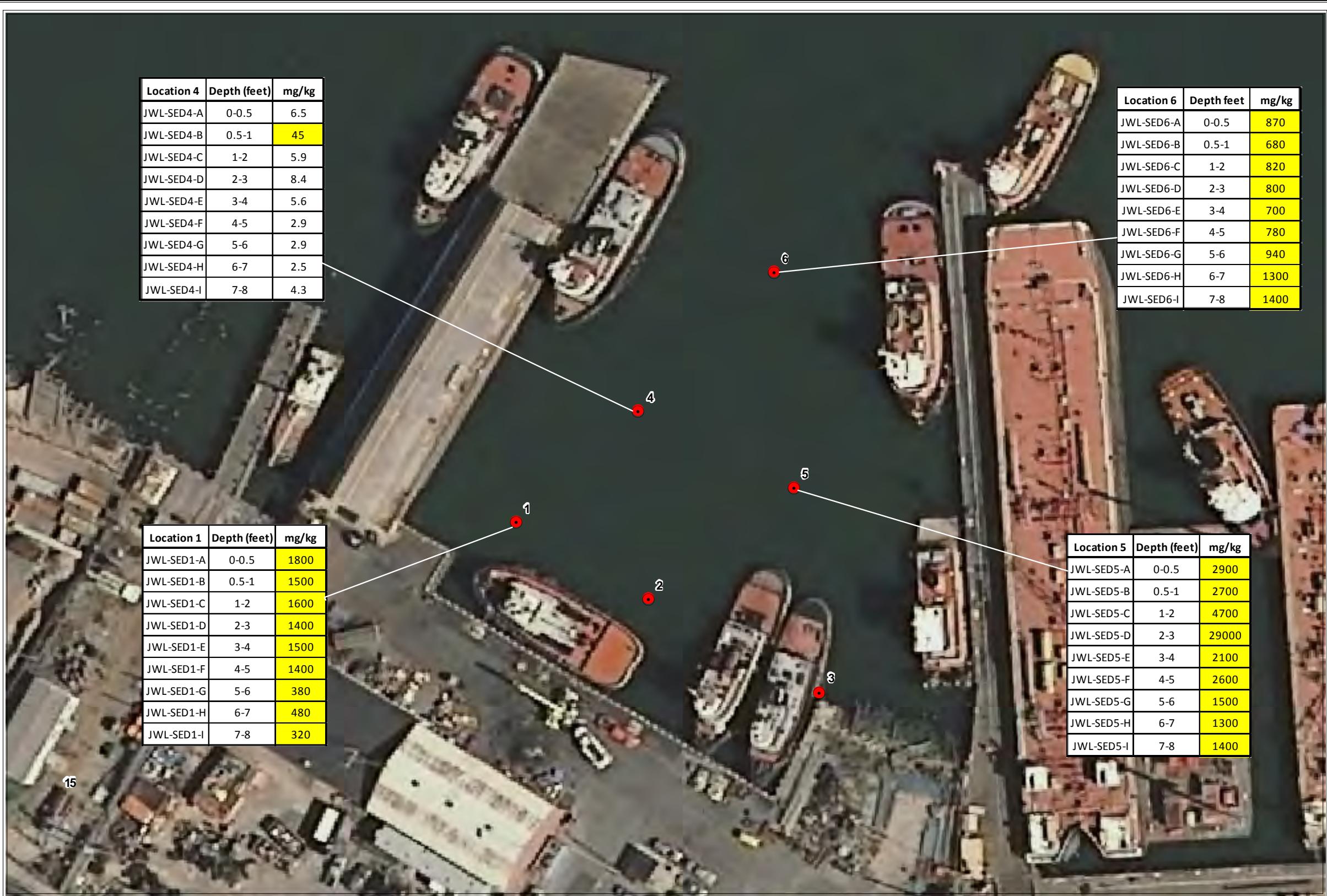


Water Sampling
in the Kill Van Kull
(Kemmerer Bottle)



Well Sampling at MSC-5

Figure 3
2011 Water Samples
Jewett White Lead Site
Staten Island, New York



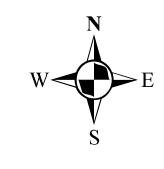
Map create using 2007 color orthophotography from NJGIN.

Map Creation Date: November 2011

Coordinate system: New York State Plane
FIPS: 3104
Datum: NAD83
Units: Feet

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MXD file: g:\arcinfo\projects\SERAS01\SER00138_JewettWhiteLead\138_Sediment_Sample_F4

50 0 50 Feet



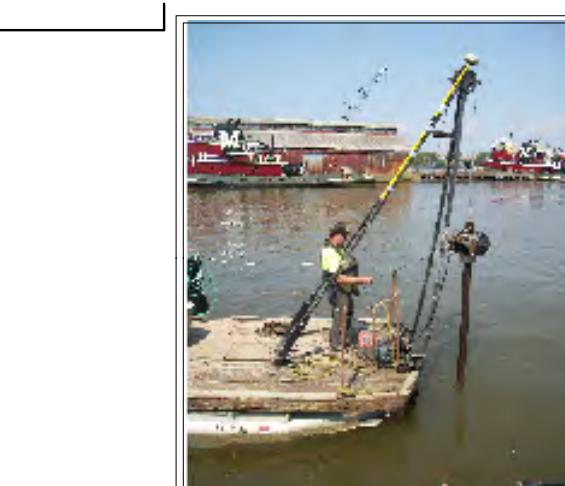
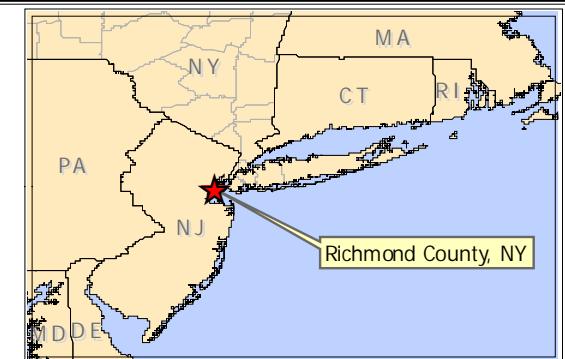
Magnetic North

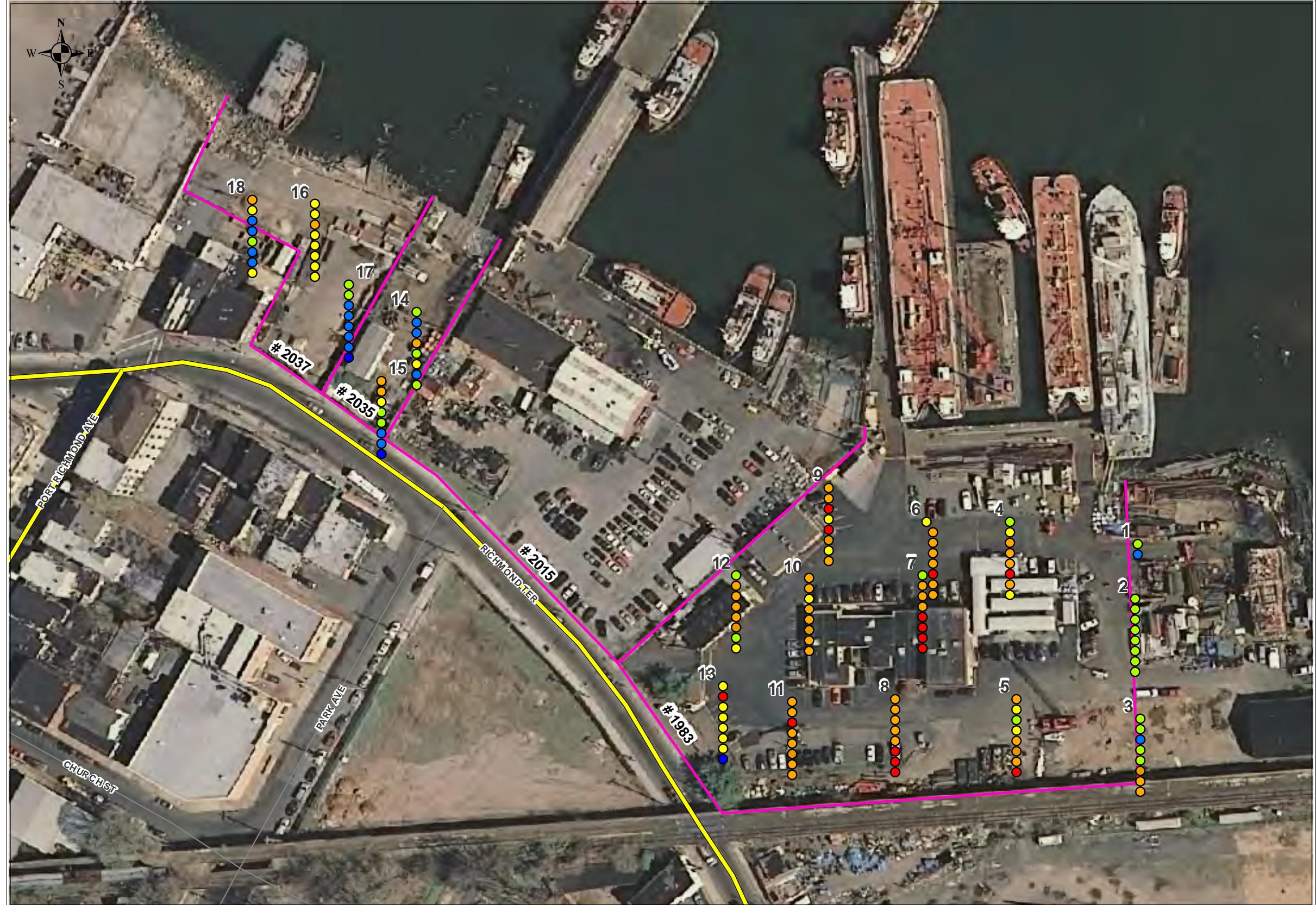
NOTE:
Due to refusal, no samples were collected on locations 2 and 3.

U.S. EPA Environmental Response Team
Scientific Engineering Response and Analytical Services
EP-W-09-031
W.A. # 0-138

Representative
Sediment Core "JWL-SED-4"

Figure 4
2011 Sediment Samples
Jewett White Lead Site
Staten Island, New York





Map created using 2007 color orthophotography from NJGIN
and Site Survey GPS Data, 2011 sample results data.

Map Creation Date: 14 November 2011

Coordinate system: New York State Plane
FIPS: 3104
Datum: NAD83
Units: Feet

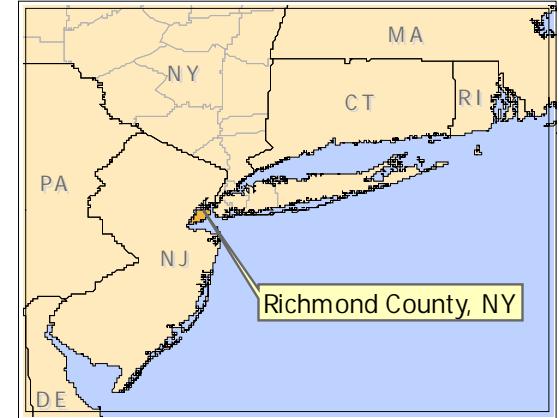
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MXD file: g:\arcinfo\projects\SERAS01\SER00138_JewettWhiteLead\138_TR_2011_Soil_Samples_8Depth_f5

100 0 100
Feet

Note:

Project Action Limit is 800 mg/kg Lead in Soil.

Soil Sampling Location Numbers (#s) are indicated in text and analytical reports as "JWL-Soil#". E.g. "18" in the figure represents the soil sampling location "JWL-Soil18".



Legend

Lead in Soil (mg/kg)
Color Indicates Concentration

- < 100
- 100 - 400
- 401 - 800
- 801 - 10,000
- 10,001 - 100,000

— Property Line

Sampling Level Below Ground (feet)

- | | | |
|---|-------|-----|
| ○ | 0 - 1 | "A" |
| ○ | 1 - 2 | "B" |
| ○ | 2 - 3 | "C" |
| ○ | 3 - 4 | "D" |
| ○ | 4 - 5 | "E" |
| ○ | 5 - 6 | "F" |
| ○ | 6 - 7 | "G" |
| ○ | 7 - 8 | "H" |

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EP-W-09-031
W.A. # 0-138

Figure 5
2011 Soil Samples
Jewett White Lead Site
Staten Island, New York

Appendix A
Proposed Sampling Plan
Jewett White Lead Site 2011 Field Activities
Jewett White Lead Site
Staten Island, New York
December 15, 2011

Lockheed Martin

Scientific Engineering Response and Analytical Services

2890 Woodbridge Avenue Building 209

Edison, NJ 08837-3679

Telephone 732-321-4200 Facsimile 732-494-4021

LOCKHEED MARTIN



Date: June 17, 2011

To: Cheryl Hawkins U.S. EPA/ERT Work Assignment Manager

Through: Dennis Miller, SERAS Program Manager *DM 80*

From: Christopher Gussman, SERAS Task Leader *for C. Gussman business*

Subject: SITE QUALITY ASSURANCE PROJECT PLAN* AND FIELD SAMPLING PLAN
Sampling Effort at the Jewett White Lead Site

*This document is being included as Appendix A in the Site Specific Uniform Federal Policy for Quality Assurance Project Plants (UFP-QAPP) specific for this site. This particular document focuses on the sampling plan and field activities. Quality Assurance details may be found within the UFP-QAPP.

Background

The Jewett White Lead Site consists of the historic footprint of the former Jewett White Lead Company facility and the extent of contamination which includes the 1.07-acre parcel of land at 2000-2012 Richmond Terrace and the approximately 4.41-acre parcel of land at 2015 Richmond Terrace (of which, approximately 2.25-acres is not covered by the surface waters of the Kill Van Kull), in the Borough of Staten Island, Richmond County, New York (NY). Historically, John Jewett & Sons White Lead Company operated a white lead manufacturing facility at the Site. John Jewett & Sons White Lead Company owned the Site from 1839 until April 3, 1890 when National Lead & Oil Company of New York (National Lead) acquired the Site property. National Lead continued the manufacture of white lead, until a fire destroyed the plant's main building and storage house in 1920. On December 31, 1943, Moran Towing Corporation acquired the 2015 Richmond Terrace portion of the Site from National Lead. On May 31, 1946, National Lead sold the remaining parcel of land located at 2000 Richmond Terrace. Between 1949 and 1990, various other businesses operated at the 2000-2012 Richmond Terrace property, including Sedutto's Ice Cream factory.

Currently, the property at 2000-2012 Richmond Terrace is fenced and was recently used to store construction equipment and materials from local construction projects. The portion of the Site located at 2015 Richmond Terrace is presently owned by the Moran Towing Corporation, an active tug boat facility.

EPA Region II was contacted in June 2008 to evaluate the Site for possible clean up. The agency collected soil samples to a depth of three feet at the Site in December 2008. Elevated concentrations of lead (up to 160,000 milligrams per kilogram [mg/kg]) were detected in soil throughout most of the 2000-2012 Richmond Terrace property, both laterally and with depth. Evidence of surface runoff was apparent along the northern boundary of the property during the soil sampling event.

The EPA/ Environmental Response Team (ERT) and Lockheed Martin Response, Engineering and Analytical Contract (REAC) performed additional sampling and evaluation of surrounding homes and properties, including the railroad trestle and the 2015 Richmond Terrace property portion of the Jewett White Lead Site in 2009. EPA conducted additional sampling throughout the Jewett White Lead Site in support of an Engineering Evaluation/Cost Analysis (EE/CA) in October 2010. Elevated lead levels were detected both laterally and with depth in the soils at the 2015 Richmond Terrace property.

EPA needs to continue to delineate the extent of the lead impacts to determine the most appropriate removal action for this portion of the Jewett White Lead Site. It has been determined that lead extends through the water table at the 2015 Richmond Terrace property with some lead impacts to the groundwater along the waterfront, but it is not known if the lead contamination has migrated to neighboring properties or into the surface water and sediments of

The Kill Van Kull. The purpose of the current field investigations will be to determine if elevated lead levels may be found in the surrounding properties, within groundwater, and within sediment in the Kill Van Kull adjacent to the site, and to support an EE/CA for the 2015 Richmond Terrace property portion of the Jewett White Lead Site.

ERT and Lockheed Martin Scientific Engineering Response and Analytical Services (SERAS) personnel will assist Region II in this effort. This document represents an outline of this sampling effort. More complete details may be found in the site specific UFP-QAPP.

Current Areas of Investigation

The current investigation will include the installation of three, 2-inch (") monitoring wells, sampling of groundwater from these three wells and one previously installed well, sampling of water within the Kill Van Kull, sampling of sediment at six locations at multiple depths within the Kill Van Kull, and sampling of soil from three surrounding properties. Sampling areas may be viewed in Figure 1.

The three wells will be installed close to the water, and parallel to the shore at the Moran Towing Corporation located at 2015 Richmond Terrace, Staten Island, New York. Sediment samples will be collected within the Kill Van Kull adjacent to this property and within the boundaries of two large docks. Water samples will be collected along this property boundary and adjacent to four monitoring wells. Soil samples will be collected from Block 185, Lot 539 = 1983-1995 Richmond Terrace (Reinauer Transportation Companies, LLC), Block 185, Lot 564 = 2035 Richmond Terrace (2035 Richmond Terrace, Inc., which is also home to Transatlantic Cable Co. according to signs posted on the fencing) and Block 185, Lot 568 = 2037 Richmond Terrace (Ferry Street Enterprises, Inc.).

Sampling Dates

Sediment collection (VibracoreTM) and well installation are anticipated to occur during the week of July 11, 2011. Soil and well sampling is anticipated to occur the week of July 11 or July 18, 2011. These dates are subject to change. It is, however, anticipated that sediment collection and well installation will occur at approximately the same time, in July and that the soil sampling and well sampling may occur during another week after sediment sampling and well installation.

Sediment Sampling

Sediment samples will be collected from six locations distributed within the area of interest. Approximate sediment sampling locations may be observed on Figure 1. A SERAS subcontractor will conduct the VibracoreTM sediment collection. A pontoon boat or other similar vehicle will be utilized to position the VibracoreTM over the sampling location. Cores, 4-inch diameter, will be driven to a depth of 8 feet below the sediment/water interface or to refusal. The sediment samples will be collected every foot of the core. The top 0-6" and 6-12 of the sediment core and each foot below to a depth of 8-feet will be sampled. The sediment samples will be placed in a trough or aluminum pan, homogenized and put into 4 ounce jars to be analyzed for inductively-coupled plasma (ICP metals). Surface sediment (0-6) will be analyzed for Target Analyte List (TAL) metals. Samples will be turned over to Region II for analyses. Each sediment sample will be given a unique identification JWL-SEDX-Y where X= 1 to 6 indicating the sample location and Y= A through H according to depth, where A is a composite of the surface 0-6" below sediment surface, B= 6-12" below the sediment surface, C= 12-24" below sediment surface, D= 24-36" below sediment surface, E= 36-48" below sediment surface, F= 48-60" below sediment surface, G= 60-72" below sediment surface, H= 72-84" below sediment surface and I= 84-96" below sediment surface.

Well Installation and Water Sampling

Three flush mount, 2-inch monitoring wells will be installed by a SERAS subcontractor. The wells will be installed in a manner similar to the two existing monitoring wells on site, MSC-1 and MSC-2. These new wells will run in a line with MSC-1 approximately parallel to the Kill Van Kull (see Figure). The wells will be installed at a depth of 15-20', with a 10' screened length created using 2-inch diameter, 0.01-inch slot PVC riser, topped with a cement surface seal, flush-mounted in road box.

Wells will be developed following SERAS Standard Operating Procedure (SOP) #2044, *Well Development*. Groundwater samples will be collected from monitor wells according to SERAS SOP #2007, *Groundwater Sampling*.

Water samples will be collected from the Kill Van Kull, at four locations parallel to these four wells, at the surface, middle, and bottom of the water column into appropriate 1-liter poly containers according to SERAS SOP #2013, *Surface Water Sampling*. Filtered and unfiltered samples will be collected at each well and location within the Kill Van Kull.

Soil Sampling

A Direct Push rig will be used to collect up to 28 soil cores, up to a depth of 8-feet or refusal, from three properties adjacent to the site (Figure 1). Eighteen locations have been preselected along a 100-foot grid. Additional locations may be judgmentally selected in the field by EPA. Cores will be divided into one foot intervals. Each soil sample will be given a unique identification JWL-SoilX-Y where X= 1 to 28(maximum) according to the sample location and Y= A through H according to depth where A is the surface 0-12" below soil surface, B= 12-24" below soil surface, C= 24-36" below soil surface, D= 36-48" below soil surface, E= 48-60" below soil surface, F= 60-72" below soil surface, G= 72-84" below soil surface, and H= 84-96" below soil surface. During installation of the monitoring wells, a soil sample will be collected from the core at the water table.

Soil samples will be brought back to the ERT/SERAS laboratory for processing. Alternatively, soil samples may be processed and analyzed by X-ray fluorescence (XRF) in the field. Soil samples will be analyzed for lead (Pb) by XRF and 20 percent of the XRF samples will be sent to the Region II Laboratory for confirmation by ICP. The samples collected from the well installation cores will not be analyzed by XRF but submitted to the laboratory for analysis by ICP. All samples will be collected in accordance with SERAS SOP #2012, *Soil Sampling*. If required, decontamination of non-dedicated sampling equipment will occur in accordance with SERAS SOP #2006, *Sampling Equipment Decontamination*, in the following order: non-phosphate soap wash, tap water rinse and distilled water rinse.

Sample preparation, analysis, and quality assurance/quality control (QA/QC) procedures used in this study will conform to those described in ERT/SERAS SOP #1720, *Operation of the NITON XLT792YW Field Portable X-ray Fluorescence Instrument*.

Soil Sample Preparation

Cores will be cut and divided at the designated intervals. Site soil will be mixed, by interval, in aluminum trays. The samples will then be placed in labeled plastic bags or 4-ounce jars. Each sample will be mixed with a stainless steel spoon. Stones and debris will be removed prior to placing 10-20 grams of the sample into a labeled aluminum weighing dish. The samples may be dried in an oven for 1-2 hours as necessary. Duplicates will be prepared as needed. After drying, the sample may be ground in a mortar/pestle if necessary and then passed through a 10-mesh stainless steel sieve to remove large material and organic matter. The sample will then be placed in a labeled 31-millimeter (mm) polyethylene X-ray sample cup and sealed with 0.2-mm thick polypropylene X-ray window film. Prior to XRF analysis, each sample cup will be gently tapped to pack the sample evenly against the film window. The XRF cup will be placed in the NITON portable test stand (film side down) above the NITON XLT792YW and analyses initiated.

Training and Documentation

All field personnel that visit the site will have the following documented training:

- Occupational Safety and Health (OSHA) 40-hour and 8-hour refresher in Hazardous Waste Operations (29 CFR1910.120)
- Department of Transportation (DOT) hazardous materials shipping
- First Aid and Cardiopulmonary Resuscitation (CPR) Training (at least one team member)

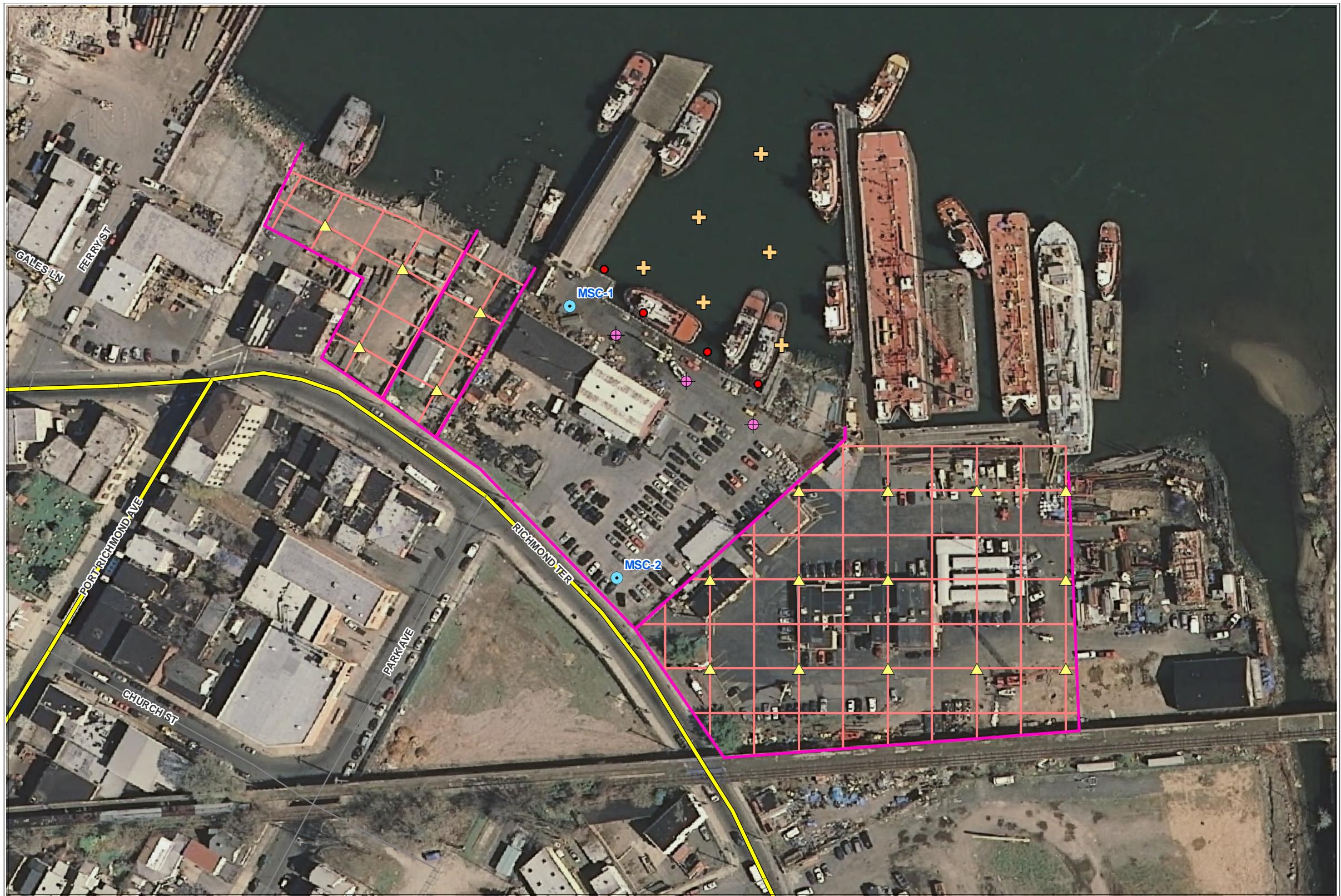
All documentation will be recorded in accordance with SERAS SOP #4001, *Logbook Documentation* and SERAS SOP #2002, *Sample Documentation*.

Field sampling data will initially be recorded in field notebooks and in SCRIBE data files. All samples will be identified by the field assigned number. Samples sent to the laboratories will be assigned a unique identifier, which identifies the sample to the laboratory personnel. This number can later be cross-referenced to the field number. All laboratory procedures will be reviewed and the data verified for the appropriate quality assurance objectives. Any problems identified will be brought to the attention of the Task Leader and EPA/ERT Work Assignment Manager for resolution before release of the final report. All deliverables will be posted to the ERT/Information Management System (IMS) website immediately upon completion. Posting of the reports will be considered as completion of the deliverable. Both hard copy and electronic formats will remain permanently in the SERAS archives. Electronic copies of deliverables will be archived in accordance with Administrative Procedure (AP) 34, *Archiving Electronic Files*. Field logbooks will also be archived once the project is completed and closed.

All sample locations and appropriate reference points will be recorded by a global positioning system (GPS). GPS survey data will initially be collected on a data logger and later transferred to an office computer for processing. Field sampling data will initially be recorded in field notebooks or on field data sheets. All samples will be identified by unique field sample numbers and EPA or subcontractor laboratory sample numbers.

The Task Leader (TL) and QA/QC Officer are responsible for QA assessments and corrective action for this project. All project deliverables will receive an internal peer review prior to release, per guidelines established in the SERAS AP #22, *Peer Review of Deliverables*.

The EPA Work Assignment Manager for this task has the responsibility of verifying that the proper SOPs and sampling procedures are followed. If any technical issues or deficiencies are identified, they will be reported to the SERAS TL for immediate resolution or corrective action. Any changes in scope of work will be documented on a Field Change Form and approved by the Work Assignment Manager. Note UFP-QAPP updates may result from field changes.



Map created using 2007 color orthophotography from NJGIN.

Map Creation Date: 10 May 2011

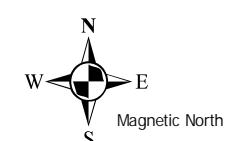
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FIPS: 3104

Datum: NAD83

Units: Feet

120 0 120
Feet



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W.A.# 0-138



- Legend**
- Existing Monitor Well
 - ✚ Approximate Location of Vibracoring
 - Approximate Location of Well Installation
 - Approximate Location of Water sample (Surface, Middle, Bottom)
 - ▲ Specific Soil Sample Location (Additional Locations may be selected)
 - ▬ Property Line
 - ▬ General Area of Geoprobe Samples

Figure 1
Jewett White Lead Site Sampling Areas
Jewett White Lead Site
Staten Island, New York

Appendix B
Soil Core Logs
Jewett White Lead Site 2011 Field Activities
Jewett White Lead Site
Staten Island, New York
December 15, 2011

Borehole Number: JWL-SOIL-1

Lockheed Martin/SERAS
2890 Woodbridge Avenue
Building 209 Annex

Project: Jewett White Lead Site (WA # 138)

Enclosure:

Client: ERT

Geologist: LA

Site Location: Staten Island, NY

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
0		FILL Dark gray m angular GRAVEL, some cf gray sand, tr dark gray vf angular gravel, tr green serpentinite, tr black mica (pyroxene?), hard, loose, dry				7/19/2011	JWL-SOIL-1A (0-1')	
1				1.50			JWL-SOIL-1B (1-2')	
2				2.00				
2		FILL Medium brown angular GRAVEL, tr red debris (brick pieces), hard, loose, dry Refusal at 2', end of boring 2'						
3								
4								
5								
6								
7								
8								
9								
10								

Drill Method: DIRECT PUSH

Installed: 7/18/2011

Hole Size: 2 inches

Drill Date: 7/18/2011

Installation Date: 7/18/2011

Datum: GRADE

Borehole Number: JWL-SOIL-2

Lockheed Martin/SERAS
2890 Woodbridge Avenue
Building 209 Annex

Project: Jewett White Lead Site (WA # 138)

Enclosure:

Client: ERT

Geologist: LA

Site Location: Staten Island, NY

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
0		ASPHALT Black ASPHALT, slight TPH odor, hard, dry	0.50				JWL-SOIL-2A (0-1')	
1		FILL Green and brown m angular GRAVEL, hard, loose and dry	1.00				JWL-SOIL-2B (1-2')	
2		FILL Light greenish gray m angular GRAVEL, tr brown f sand, hard, very slight TPH odor, loose and dry	2.00				JWL-SOIL-2C (2-3')	JWL-SOIL-2C
2		FILL Brown slightly plastic CLAY, some vf brown sand, tr green m angular gravel, moist	2.50			7/19/2011	JWL-SOIL-2D (3-4')	
3		FILL Brown m angular GRAVEL, tr brown clay, tr brown vf sand, hard, loose, moist	2.80				JWL-SOIL-2E (4-5')	
4		FILL Brown CLAY, some brown vf sand, some brown m angular gravel, moist	3.00				JWL-SOIL-2F (5-6')	
5		MEADOW MAT Black and brown ORGANIC MATERIAL, moist Possibly wetlands	4.00				JWL-SOIL-2G (6-7')	
6		CLAY Reddish brown and brown CLAY, some brown vf sand, tr black meadow mat, tr black mica (pyroxene?), wet at 3.3' Possibly wetland deposits	5.00			7/19/2011	JWL-SOIL-2H (7-8')	JWL-SOIL-2H
7		CLAY Black and brown plastic and soft CLAY, tr brown vf sand, tr black mica (pyroxene?), tr brown vf angular gravel, sulfidic odor, moist Possibly wetland deposits	6.00					
8		CLAY Brown slightly plastic CLAY, tr brown m angular gravel, moist Possibly wetland deposits	8.00					
9								
10								

Drill Method: DIRECT PUSH

Installed: 7/18/2011

Hole Size: 2 inches

Drill Date: 7/18/2011

Installation Date: 7/18/2011

Datum: GRADE

Borehole Number: JWL-SOIL-3

Lockheed Martin/SERAS

2890 Woodbridge Avenue

Bldg. 209 Annex

Edison, NJ 08837

Project: Jewett White Lead Site (WA # 138)

Enclosure:

Client: ERT

Geologist: LA

Site Location: Staten Island, NY

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
0		FILL Brown m angular GRAVEL, some brown vf sand, tr white f gravel, hard, loose, dry	1.00			7/19/2011	JWL-SOIL-3A (0-1')	
1		FILL Reddish c angular DEBRIS (brick fragments), tr yellow and white mf sand, loose, dry	2.00				JWL-SOIL-3B (1-2')	
2		FILL Reddish brown mf angular GRAVEL, some brown mf sand, tr gray f silt, tr black meadow mat, hard, moist	3.00				JWL-SOIL-3C (2-3')	
3		FILL Dark gray, light green and light brown mf angular GRAVEL, some brown m sand, tr gray f silt, tr black meadow mat, hard, sulfidic odor at 4', wet at 4'	5.00			7/19/2011	JWL-SOIL-3D (3-4')	
4							JWL-SOIL-3E (4-5')	JWL-SOIL-3E
5		FILL Brown and black mf angular GRAVEL, some black meadow mat, tr brown f sand, tr brown clay, hard, very strong sulfidic odor, TPH odor at 5.5', moist	5.50				JWL-SOIL-3F (5-6')	
6		FILL Black mf angular GRAVEL, some black meadow mat, tr f brown sand, hard, sulfidic odor, very strong TPH odor at 6', moist	6.00				JWL-SOIL-3G (6-7')	
7		FILL Brown and black mf angular GRAVEL, some black meadow mat, tr brown f sand, tr brown clay, hard, sulfidic and TPH odor, moist	8.00				JWL-SOIL-3H (7-8')	
8		End of boring at 8'						
9								
10								

Drill Method: DIRECT PUSH

Installed: 7/18/2011

Hole Size: 2 inches

Drill Date: 7/18/2011

Installation Date: 7/18/2011

Datum: GRADE

Sheet: 1 of 1

Borehole Number: JWL-SOIL-4

Lockheed Martin/SERAS

2890 Woodbridge Avenue

Bldg. 209 Annex

Edison, NJ 08837

Project: Jewett White Lead Site (WA # 138)

Enclosure:

Client: ERT

Geologist: LA

Site Location: Staten Island, NY

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
0		ASPHALT Dark green and black cm angular GRAVEL, some brown c sand, tr brown m sand, hard, loose, odorless, dry	0.50				JWL-SOIL-4A (0-1')	
1		FILL Brown cm angular GRAVEL, some light brown c sand, hard, loose, odorless, dry	1.00			7/19/2011	JWL-SOIL-4B (1-2')	JWL-SOIL-4B
2		FILL Brown cm angular GRAVEL, some light brown c sand, tr black meadow mat, tr red m debris (brick fragments), hard, odorless, dry	2.00				JWL-SOIL-4C (2-3')	
3		FILL Black cm angular GRAVEL, some black c sand, tr black meadow mat, tr red m debris (brick fragments), hard, odorless, dry	3.00				JWL-SOIL-4D (3-4')	
4		MEADOW MAT Greenish gray and black ORGANIC MATERIAL, sulfidic odor, moist Possibly wetlands	3.50				JWL-SOIL-4E (4-5')	
5		MEADOW MAT Black ORGANIC MATERIAL, some orange cf sand, sulfidic odor, very moist at 3.5' Possibly wetlands	4.00				JWL-SOIL-4F (5-6')	
6		SAND Black c SAND, some brown clay, tr brown f silt, tr black meadow mat, sulfidic odor, moist Possibly dredged spoils	5.00			7/19/2011	JWL-SOIL-4G (6-7')	JWL-SOIL-4G
7		GRAVEL Black mf angular GRAVEL, some black clay, some black meadow mat, hard, sulfidic odor, dry Possible dredged spoils	6.00				JWL-SOIL-4E (7-8')	
8		MEADOW MAT Black ORGANIC MATERIAL, some black clay, tr black mf angular gravel, tr gray f Silt, sulfidic odor, moist Possibly wetlands	7.00					
8		GRAVEL Gray c angular GRAVEL, some cm gray sand, tr green (serpentinite) and black mica (pyroxene?), hard, odorless, moist Possibly glacial moraine deposits End of boring at 8'	8.00					
9								
10								

Drill Method: DIRECT PUSH

Installed: 7/18/2011

Hole Size: 2 inches

Drill Date: 7/18/2011

Installation Date: 7/18/2011

Datum: GRADE

Sheet: 1 of 1

Borehole Number: JWL-SOIL-5

Lockheed Martin/SERAS

2890 Woodbridge Avenue

Bldg. 209 Annex

Edison, NJ 08837

Project: Jewett White Lead Site (WA # 138)

Enclosure:

Client: ERT

Geologist: LA

Site Location: Staten Island, NY

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
0		ASPHALT Green c angular GRAVEL, some green mf angular gravel, tr dark brown clay, hard, loose, slight TPH odor, dry	0.30				JWL-SOIL-5A (0-1')	
1		FILL Very light gray c angular GRAVEL, tr brown clay, hard, loose, dry	1.00				JWL-SOIL-5B (1-2')	
2		FILL Gray cf angular GRAVEL, tr red m debris (brick fragments), tr brown clay, tr green mica (serpentinite), hard, loose, dry	2.00				JWL-SOIL-5C (2-3')	
3		FILL Brown cf angular GRAVEL, some brown stiff clay, tr gray f silt, tr black mica (pyroxene?), hard, dry	3.00			7/19/2011	JWL-SOIL-5D (3-4')	JLW-SOIL-5D
4		FILL Black m angular and micaceous GRAVEL, hard, dry	3.50				JWL-SOIL-5E (4-5')	
4		FILL Brown c SAND, some black meadow mat, tr gray mf angular gravel, tr brown clay, dry	4.00				JWL-SOIL-5F (5-6')	
5		FILL Red m DEBRIS (brick fragments), hard, dry	4.50				JWL-SOIL-5G (6-7')	
5		FILL Black c SAND, some gray m angular gravel, tr brown clay, loose, dry Possibly dredged spoils	5.00				JWL-SOIL-5H (7-8')	
6		FILL Light yellow vc SAND, loose, dry Possibly dredged spoils	6.00					
7		FILL Black vc SAND, little brown f gravel, tr brown gravel, tr brown debris (brick fragments), tr black meadow mat, sulfidic odor Possibly dredged spoils	7.00					
8		FILL Gray c SAND, some black meadow mat, tr green (serpentinite) and black (pyroxene?) mica, sulfidic and odor, TPH odor, sheen at 7.0', wet at 7.5' Possibly dredged spoils End of boring at 8'	8.00					
9								
10								



Drill Method: DIRECT PUSH

Installed: 7/18/2011

Hole Size: 2 inches

Drill Date: 7/18/2011

Installation Date: 7/18/2011

Datum: GRADE

Sheet: 1 of 1

Borehole Number: JWL-SOIL-6

Project: Jewett White Lead Site (WA # 138)

Client: ERT

Site Location: Staten Island, NY

Lockheed Martin/SERAS

2890 Woodbridge Avenue

Bldg. 209 Annex

Edison, NJ 08837

Enclosure:

Geologist: LA

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
0		FILL Gray mf angular GRAVEL, hard, loose, dry	0.50					
1		FILL Light gray and light brown c SAND, tr brown m sand, loose, dry	1.00					
1		FILL Black m angular GRAVEL, tr brown clay, tr black meadow mat, hard, slight TPH odor, dry	1.50					
2		FILL Dark brown and black c SAND, some brown f angular gravel, tr brown clay, tr serpentine, loose, dry <i>Possibly dredged spoils</i>	3.00					
3		FILL Black c SAND, some brown f angular gravel, tr brown clay, tr serpentine, TPH odor at 3.8', wet at 3' <i>Possibly dredged spoils</i>	4.00					
4		FILL Black c SAND, some brown f angular gravel, tr brown clay, tr serpentine, strong TPH odor, wet <i>Possibly dredged spoils</i>	5.00					
5		FILL Black f angular GRAVEL, some black clay, tr black c sand, black degraded hydrocarbons, hard, wet	6.50					
6								
7		MEADOW MAT Black ORGANIC MATERIAL, strong TPH odor, sheen, wet <i>Possibly wetlands</i>	7.00					
7		SAND Dark gray vc SAND, some gray mf angular gravel, tr gray f clay, tr green (serpentine) and black (pyroxene?) mica, wet <i>Possibly wetland deposits</i>	8.00					
8		End of boring at 8'						
9								
10								



Drill Method: DIRECT PUSH

Drill Date: 7/18/2011

Installed: 7/18/2011

Installation Date: 7/18/2011

Hole Size: 2 inches

Datum: GRADE

Sheet: 1 of 1

Borehole Number: JWL-SOIL-7

Lockheed Martin/SERAS

2890 Woodbridge Avenue

Bldg. 209 Annex

Edison, NJ 08837

Project: Jewett White Lead Site (WA # 138)

Enclosure:

Client: ERT

Geologist: LA

Site Location: Staten Island, NY

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
0		ASPHALT Black and green micaceous cf angular GRAVEL, tr green f sand, hard, loose, dry	0.30					
1		FILL Gray cf SAND, some gray cf brown angular gravel, tr green (serpentinite) and black (pyroxene?) mica, slight TPH odor, loose, dry <i>Possibly dredged deposits</i>	1.00				JWL-SOIL-7A (0-1')	
2		MEADOW MAT Black ORGANIC MATERIAL, some black f angular gravel, little gray cf sand, sulfidic odor, strong TPH odor, dry <i>Possibly wetlands</i>	2.00				JWL-SOIL-7B (1-2')	
3		SAND Black c SAND, tr black m angular gravel, strong TPH odor, moist <i>Possibly dredged spoils</i>	3.00			7/19/2011	JWL-SOIL-7C (2-3')	JWL-SOIL-7C
4		SAND Black c SAND, tr black m angular gravel, tr black meadow mat, strong TPH odor, sheen, moist <i>Possibly dredged spoils</i>	4.00				JWL-SOIL-7D (3-4')	
5		SAND Black and dark gray cf SAND, tr gray f angular gravel, strong TPH odor, moist <i>Possibly dredged spoils</i>	5.00				JWL-SOIL-7E (4-5')	
6		CLAY Black and dark brown slightly plastic CLAY, tr black cf sand, strong TPH odor, wet at 5' <i>Possibly dredged spoils</i>	6.00				JWL-SOIL-7F (5-6')	
7		MEADOW MAT Dark brown and black ORGANIC MATERIAL, some brown clay, tr black cf sand, strong TPH odor, sulfidic odor, wet <i>Possibly wetlands</i>	7.00				JWL-SOIL-7G (6-7')	
8		MEADOW MAT Black ORGANIC MATERIAL, some brown clay, tr black cf sand, sulfidic odor, strong TPH odor, damp <i>Possibly wetlands</i> End of boring at 8'	8.00			7/19/2011	JWL-SOIL-7H (7-8')	JWL-SOIL-7H
9								
10								

Drill Method: DIRECT PUSH

Installed: 7/18/2011

Hole Size: 2 inches

Drill Date: 7/18/2011

Installation Date: 7/18/2011

Datum: GRADE

Sheet: 1 of 1

Borehole Number: JWL-SOIL-8

Lockheed Martin/SERAS

2890 Woodbridge Avenue

Bldg. 209 Annex

Edison, NJ 08837

Project: Jewett White Lead Site (WA # 138)

Enclosure:

Client: ERT

Geologist: LA

Site Location: Staten Island, NY

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
0		FILL Dark gray c SAND and gray m angular gravel, loose, dry	0.50				JWL-SOIL-8A (0-1')	
1		FILL Dark brown and black vc SAND, some gray m angular gravel, tr red debris (brick fragments), tr green serpentinite moderate TPH odor, dry	1.00				JWL-SOIL-8B (1-2')	
2		FILL Brown and green c angular GRAVEL, little brown clay, little red debris (brick fragments), hard, moderate TPH odor, dry	2.00				JWL-SOIL-8C (2-3')	
3		FILL Black mf angular GRAVEL, little brown clay, tr c sand, tr black meadow mat, hard, sulfidic odor, moderate TPH odor, dry	3.00				JWL-SOIL-8D (3-4')	
4		FILL Black and green c angular GRAVEL, some green c sand, little black meadow mat, tr brown clay, hard, TPH odor, sheen at 3', wet	4.00			7/19/2011	JWL-SOIL-8E (4-5')	JWL-SOIL-8E
5		FILL Brown and gray mf angular GRAVEL, some red m debris (brick fragments), hard, strong TPH odor, moist	5.00				JWL-SOIL-8F (5-6')	
6		FILL Dark brown CLAY, some brown m sand, very strong TPH odor, plastic, wet <i>Possibly dredged spoils</i>	6.00				JWL-SOIL-8G (6-7')	
7		FILL Black and green c angular GRAVEL, little brown clay, degraded hydrocarbon, hard, strong TPH odor, sheen at 6.5', free product at 7', wet	7.00				JWL-SOIL-8H (7-8')	
8		FILL Red DEBRIS (brick fragments), some black meadow mat, tr brown clay, strong TPH odor, sheen at 7', free product at 7' End of boring at 8'	8.00					
9								
10								

Drill Method: DIRECT PUSH

Installed: 7/18/2011

Hole Size: 2 inches

Drill Date: 7/18/2011

Installation Date: 7/18/2011

Datum: GRADE

Sheet: 1 of 1

Borehole Number: JWL-SOIL-9

Lockheed Martin/SERAS

2890 Woodbridge Avenue

Bldg. 209 Annex

Edison, NJ 08837

Project: Jewett White Lead Site (WA # 138)

Enclosure:

Client: ERT

Geologist: LA

Site Location: Staten Island, NY

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
0		FILL Green and black cf angular and micaceous GRAVEL, some angular serpentine, red m debris (brick fragments), tr brown c sand, tr brown f sand, hard, slight TPH odor, loose, dry	1.00				JWL-SOIL-9A (0-1')	
1		FILL Black cf angular GRAVEL, some brown clay, little black meadow mat, tr black and brown m sand, hard, degraded hydrocarbons, strong TPH odor, sheen, product at 2', moist	2.00			7/20/2011	JWL-SOIL-9B (1-2')	JWL-SOIL-9B
2			2.50				JWL-SOIL-9C (2-3')	
3		FILL Black cf angular GRAVEL, some brown clay, little black meadow mat, tr black and brown m sand, degraded hydrocarbons, hard, strong TPH odor, sheen, wet at 2.5'	3.50				JWL-SOIL-9D (3-4')	
4		FILL Black cf angular GRAVEL, some brown clay, little black meadow mat, tr black and brown m sand, degraded hydrocarbons, hard, very strong TPH odor, sheen, wet	4.00				JWL-SOIL-9E (4-5')	
5		MEADOW MAT Black ORGANIC MATERIAL, some angular and micaceous serpentine, odorless, wet <i>Possibly wetlands</i>	5.00				JWL-SOIL-9F (5-6')	
6		GRAVEL Black cf angular GRAVEL, some brown clay, little black organic material, tr brown and black m sand, degraded hydrocarbons, hard, very strong TPH odor, sheen, wet <i>Possibly dredged spoils</i>				7/20/2011	JWL-SOIL-9G (6-7')	JWL-SOIL-9G
7		CLAY Brown CLAY, some black vf angular Gravel, tr cf orange sand, degraded hydrocarbons, strong TPH odor, sheen, moist <i>Possibly dredged spoils</i>					JWL-SOIL-9H (7-8')	
8		CLAY Brown CLAY, some vf black angular gravel, tr cf orange sand, degraded hydrocarbons, strong TPH odor, sheen, free product at 5', moist <i>Possibly dredged spoils</i>	8.00					
9								
10								

Drill Method: DIRECT PUSH

Installed: 7/18/2011

Hole Size: 2 inches

Drill Date: 7/18/2011

Installation Date: 7/18/2011

Datum: GRADE

Sheet: 1 of 1

Borehole Number: JWL-SOIL-10

Project: Jewett White Lead Site (WA # 138)

Client: ERT

Site Location: Staten Island, NY

Lockheed Martin/SERAS

2890 Woodbridge Avenue

Bldg. 209 Annex

Edison, NJ 08837

Enclosure:

Geologist: LA

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
0		FILL Black and dark brown cm angular and micaceous GRAVEL, little brown c sand, hard, loose, dry	1.00				JWL-SOIL-10A (0-1')	
1		FILL Black f angular and micaceous GRAVEL, some black c angular and micaceous gravel, little cf black sand, tr black clay, degraded hydrocarbons, hard, TPH product at 2.5', sheen, moist	3.00				JWL-SOIL-10B (1-2')	
2							JWL-SOIL-10C (2-3')	
3		FILL Black f angular and micaceous GRAVEL, some black c gravel, little cf black sand, tr black clay, tr black meadow mat, tr black clay, degraded hydrocarbons, hard, sheen, wet at 3.8'	4.00			7/20/2011	JWL-SOIL-10D (3-4')	JWL-SOIL-10D
4		FILL Gray c SAND, tr f gray angular gravel, tr black clay, strong TPH odor, degraded hydrocarbons, sheen, wet <i>Possibly dredged spoils</i>	6.00				JWL-SOIL-10E (4-5')	
5							JWL-SOIL-10F (5-6')	
6		FILL Gray vc SAND, tr cf angular gravel, tr gray clay, degraded hydrocarbons, TPH odor, sheen, wet <i>Possibly dredged deposits</i>	7.00				JWL-SOIL-10G (6-7')	
7		FILL Black vc SAND, tr cf angular gravel, tr gray clay, degraded hydrocarbons, TPH odor, sheen, wet <i>Possibly dredged spoils</i> End of boring at 8'	8.00				JWL-SOIL-10H (7-8')	
8								

Drill Method: DIRECT PUSH

Drill Date: 7/18/2011

Installed: 7/18/2011

Installation Date: 7/18/2011

Hole Size: 2 inches

Datum: GRADE

Sheet: 1 of 1

Borehole Number: JWL-SOIL-11

Project: Jewett White Lead Site (WA # 138)

Client: ERT

Site Location: Staten Island, NY

Lockheed Martin/SERAS

2890 Woodbridge Avenue

Bldg. 209 Annex

Edison, NJ 08837

Enclosure:

Geologist: LA

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
0		FILL Gray and brown cf angular GRAVEL, tr gray c sand, tr black clay, hard, loose, moist at 0'	1.00			7/20/2011	JWL-SOIL-11A (0-1')	JWL-SOIL-11A
1		FILL Gray cf angular GRAVEL, tr gray clay, hard, loose, dry	2.00				JWL-SOIL-11B (1-2')	
2		FILL Black cf angular GRAVEL, tr gray clay, hard, loose, dry	3.00				JWL-SOIL-11C (2-3')	
3		FILL Yellow cf angular GRAVEL, tr gray clay, degraded hydrocarbons, hard, dry	4.00				JWL-SOIL-11D (3-4')	
4		FILL Black cf angular GRAVEL, tr gray clay, hard, strong stain of TPH at 4.5', sheen at 4.5', strong TPH odor, wet at 5'	5.00			7/20/2011	JWL-SOIL-11E (4-5')	JWL-SOIL-11E
5		FILL Gray and black mf angular GRAVEL, some black meadow mat, hard, tr brown clay, strong TPH odor, sheen, wet	6.00				JWL-SOIL-11F (5-6')	
6		FILL Gray cm angular GRAVEL, tr gray clay, hard, strong TPH stain at 6.5', strong TPH odor, sheen, wet	7.00				JWL-SOIL-11G (6-7')	
7		FILL Black cm angular GRAVEL, tr gray clay, hard strong TPH stain at 7.5', strong TPH odor, sheen, hard, wet End of boring at 8'	8.00				JWL-SOIL-11H (7-8')	
8								
9								
10								

WATER TABLE
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Drill Method: DIRECT PUSH

Drill Date: 7/18/2011

Installed: 7/18/2011

Installation Date: 7/18/2011

Hole Size: 2 inches

Datum: GRADE

Sheet: 1 of 1

Borehole Number: JWL-SOIL-12

Lockheed Martin/SERAS

2890 Woodbridge Avenue

Bldg. 209 Annex

Edison, NJ 08837

Project: Jewett White Lead Site (WA # 138)

Enclosure:

Client: ERT

Geologist: LA

Site Location: Staten Island, NY

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
0		FILL Brown and gray cf angular GRAVEL, tr gray cm sand, tr gray f sand, tr brown clay, hard, dry	1.00				JWL-SOIL-12A (0-1')	
1		FILL Dark brown cf angular GRAVEL, some red m debris (brick fragments), little brown cf sand, tr brown clay, tr black meadow mat, hard, dry	2.00				JWL-SOIL-12B (1-2')	
2		FILL Dark brown f angular GRAVEL, some brown cf sand, tr green (serpentinite) and black mica (pyroxene?), loose, hard, dry	3.00			7/20/2011	JWL-SOIL-12C (2-3')	JWL-SOIL-12C
3		FILL Brown c SAND, tr brown f angular gravel, tr brown f sand, loose, odorless, moist <i>Possibly dredged spoils</i>	4.00				JWL-SOIL-12D (3-4')	
4		FILL Brown c SAND, tr brown f angular gravel, tr brown f sand, loose, odorless, moist <i>Possibly dredged spoils</i>	5.00			7/20/2011	JWL-SOIL-12E (4-5')	JWL-SOIL-12E
5		FILL Light brown and brown c angular and micaceous GRAVEL, hard, dry	6.00				JWL-SOIL-12F (5-6')	
6		FILL Gray cm angular GRAVEL, tr gray clay, strong TPH odor, sheen at 6.5', hard, wet at 7'	7.00				JWL-SOIL-12G (6-7')	
7		FILL Black cm angular GRAVEL, tr gray clay, strong TPH odor, black stain at 7.5', sheen, hard, wet End of boring at 8'	8.00				JWL-SOIL-12H (7-8')	
8								
9								
10								

WATER TABLE

Drill Method: DIRECT PUSH

Installed: 7/18/2011

Hole Size: 2 inches

Drill Date: 7/18/2011

Installation Date: 7/18/2011

Datum: GRADE

Sheet: 1 of 1

Borehole Number: JWL-SOIL-13

Project: Jewett White Lead Site (WA # 138)

Client: ERT

Site Location: Staten Island, NY

Lockheed Martin/SERAS

2890 Woodbridge Avenue

Bldg. 209 Annex

Edison, NJ 08837

Enclosure:

Geologist: LA

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
0		FILL Medium and dark brown f angular GRAVEL, some brown c sand, little brown clay, hard, loose, dry	1.00				JWL-SOIL-13A (0-1')	
1		FILL Dark brown and black f angular GRAVEL, some brown c sand, tr brown f silt, tr brown vc angular gravel, hard, loose,dry	2.00				JWL-SOIL-13B (1-2')	
2		FILL Red m DEBRIS (brick fragments), hard, loose, dry	2.30				JWL-SOIL-13C (2-3')	
3		FILL Light brown cf SAND, some brown clay, tr brown f angular gravel, tr red m debris (brick fragments), odorless, dry <i>Possibly dredged spoils</i>	3.00				JWL-SOIL-13D (3-4')	
4		FILL Light brown and brown cf angular GRAVEL, tr cf orange sand, tr red m debris (brick fragments), hard, odorless, moist	4.00				JWL-SOIL-13E (4-5')	JWL-SOIL-13E
5		FILL Brown and black cf angular and micaceous GRAVEL, some brown c sand, tr brown clay, hard, odorless, wet at 5'	5.00			7/20/2011	JWL-SOIL-13F (5-6')	
6		FILL Light brown soft and plastic CLAY, tr brown f angular gravel, tr f brown sand, odorless, moist <i>Possibly dredged spoils</i>	7.00				JWL-SOIL-13G (6-7')	
7		FILL Gray plastic and soft CLAY, tr brown f angular gravel, tr f brown sand, odorless, moist <i>Possibly dredged spoils</i> End of boring at 8'	8.00				JWL-SOIL-13H (7-8')	
8								
9								
10								

Drill Method: DIRECT PUSH

Drill Date: 7/18/2011

Installed: 7/18/2011

Installation Date: 7/18/2011

Hole Size: 2 inches

Datum: GRADE

Sheet: 1 of 1

Borehole Number: JWL-SOIL-14

Project: Jewett White Lead Site (WA # 138)

Client: ERT

Site Location: Staten Island, NY

Enclosure:

Geologist: LA

Lockheed Martin/SERAS

2890 Woodbridge Avenue

Bldg. 209 Annex

Edison, NJ 08837

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
1		FILL Black and white cf angular GRAVEL, some light brown cf sand, slight TPH odor, hard, dry	1.00				JWL-SOIL-14A (0-1')	
2		FILL Brown cf SAND, some black fv gravel, tr brown clay, odorless, dry <i>Possibly dredge spoils</i>					JWL-SOIL-14B (1-2')	
3				3.50			JWL-SOIL-14C (2-3')	
4		FILL Red m DEBRIS (brick fragments), degraded hydrocarbons, loose, hard, dry	3.70				JWL-SOIL-14D (3-4')	
5		FILL Black mf SAND, tr gray vf angular and micaceous gravel, loose, odorless, dry <i>Possibly dredge spoils</i>	4.00			8/3/2011	JWL-SOIL-14E (4-5')	JWL-SOIL-14E
6		FILL Red DEBRIS (brick pieces), black degraded hydrocarbon, loose, odorless, dry	4.50				JWL-SOIL-14F (5-6')	
7		FILL Black mf SAND, tr gray vf angular and micaceous gravel, loose, odorless, dry	6.00				JWL-SOIL-14G (6-7')	
8		FILL Very light brown to medium orange mf SAND, tr brown clay, degraded hydrocarbons, odorless, dry <i>Possibly dredge spoils</i>	7.80				JWL-SOIL-14H (7-8')	
9		FILL Light brown and orange plastic CLAY, some orange f sand, tr black f gravel, odorless, wet at 7.8' <i>Possibly dredge spoils</i>	8.00					
10		FILL Gray cf GRAVEL, some light brown and orange clay, little orange f sand, tr green (serpentinite) and black (pyroxene?) mica, wet End of boring at 8'						

WATER TABLE
▼

Drill Method: DIRECT PUSH

Drill Date: 8/2/2011

Installed: 8/2/2011

Installation Date: 8/2/2011

Hole Size: 2 inches

Datum: GRADE

Sheet: 1 of 1

Borehole Number: JWL-SOIL-15

Lockheed Martin/SERAS

2890 Woodbridge Avenue

Bldg. 209 Annex

Edison, NJ 08837

Project: Jewett White Lead Site (WA # 138)

Enclosure:

Client: ERT

Geologist: LA

Site Location: Staten Island, NY

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
0		FILL Gray, green and black c SAND, black angular and micaceous cf gravel, degraded hydrocarbon, odorless, dry	1.00				JWL-SOIL-15A (0-1')	
1		FILL Gray, green and black mf SAND, black angular and micaceous cf gravel, degraded hydrocarbons, odorless, dry				8/3/2011	JWL-SOIL-15B (1-2')	JWL-SOIL-15B
2								
3			3.30				JWL-SOIL-15C (2-3')	
4		FILL Orange to medium brown f SAND, some light brown clay, tr brown fv gravel, odorless, dry <i>Possibly dredged spoils</i>	4.00				JWL-SOIL-15D (3-4')	
5		FILL Orange to medium brown f SAND, some light brown clay, tr brown fv gravel, degraded hydrocarbons <i>Possibly dredged spoils</i>	5.00				JWL-SOIL-15E (4-5')	
6		FILL Orange to medium brown f SAND, some light brown clay, tr brown fv gravel, tr gray c gravel, tr organic material, odorless, dry <i>Possibly dredged spoils</i>	6.00				JWL-SOIL-15F (5-6')	
7		FILL Orange to medium brown f SAND, some light brown clay, tr brown fv gravel, odorless, wet at 7.5' End of boring at 8'				8/3/2011	JWL-SOIL-15G (6-7')	JWL-SOIL-15G
8			8.00				JWL-SOIL-15H (7-8')	
9								
10								

WATER TABLE

Drill Method: DIRECT PUSH

Installed: 8/2/2011

Hole Size: 2 inches

Drill Date: 8/2/2011

Installation Date: 8/2/2011

Datum: GRADE

Sheet: 1 of 1

Borehole Number: JWL-SOIL-16

Project: Jewett White Lead Site (WA # 138)

Client: ERT

Site Location: Staten Island, NY

Lockheed Martin/SERAS

2890 Woodbridge Avenue

Bldg. 209 Annex

Edison, NJ 08837

Enclosure:

Geologist: LA

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
0		FILL Gray c angular and micaceous GRAVEL, some gray cm sand, hard, loose, dry	1.00				JWL-SOIL-16A (0-1')	
1		FILL Light brown and orange cm SAND, tr black mf angular gravel, tr orange vf sand, tr light brown clay, degraded hydrocarbons, loose, odorless, dry <i>Possibly dredged spoils</i>	2.00				JWL-SOIL-16B (1-2')	
2		FILL Black mf GRAVEL, some black c gravel, tr black meadow mat, degraded hydrocarbons, hard, loose, dry	3.00				JWL-SOIL-16C (2-3')	
3		FILL Light brown mf GRAVEL, some black c gravel, tr black meadow mat, degraded hydrocarbons, hard, loose, wet at 4'	5.00			8/3/2011	JWL-SOIL-16D (3-4')	JWL-SOIL-16D
4							JWL-SOIL-16E (4-5')	
5		FILL Light mf GRAVEL, some black c gravel, tr black meadow mat, tr red m debris (brick fragments), degraded hydrocarbons, hard, loose, dry End of boring at 8'	8.00				JWL-SOIL-16F (5-6')	
6							JWL-SOIL-16G (6-7')	
7							JWL-SOIL-16H (7-8')	
8								
9								
10								

Drill Method: DIRECT PUSH

Drill Date: 8/2/2011

Installed: 8/2/2011

Installation Date: 8/2/2011

Hole Size: 2 inches

Datum: GRADE

Sheet: 1 of 1

Borehole Number: JWL-SOIL-17

Lockheed Martin/SERAS

2890 Woodbridge Avenue

Bldg. 209 Annex

Edison, NJ 08837

Project: Jewett White Lead Site (WA # 138)

Enclosure:

Client: ERT

Geologist: LA

Site Location: Staten Island, NY

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
0		FILL Dark gray and gray cf SAND, some black angular gravel, tr brown clay, odorless, loose, dry	1.00			8/3/2011	JWL-SOIL-17A (0-1')	JWL-SOIL-17A
1		FILL Dark brown cf SAND, some brown clay, tr shells, tr red f debris (brick fragments), odorless, dry	2.00				JWL-SOIL-17B (1-2')	
2		FILL Brown CLAY, brown vf sand, tr dark brown m gravel, odorless, dry	3.80				JWL-SOIL-17C (2-3')	
4		FILL Dark green cm angular GRAVEL, some dark brown clay, tr brown vf sand, hard, wet at 3.8'	4.00				JWL-SOIL-17D (3-4')	
5		FILL Dark gray and gray cf SAND, some black angular gravel, tr brown clay, odorless, loose, wet Possibly dredged spoils	5.00				JWL-SOIL-17E (4-5')	
6		FILL Brown CLAY, brown vf sand, tr dark brown m gravel, odorless, wet	6.00			8/3/2011	JWL-SOIL-17F (5-6')	JWL-SOIL-17F
6		FILL Brown slightly plastic and soft CLAY, little brown vf sand, tr gray f silt, moist	6.50				JWL-SOIL-17G (6-7')	
7		FILL Gray plastic and very soft CLAY, tr gray silt, moist	7.00				JWL-SOIL-17H (7-8')	
8		FILL Gray plastic and very soft CLAY, tr gray silt, tr black f gravel, moist End of boring at 8'	8.00					
9								
10								

Drill Method: DIRECT PUSH

Installed: 8/2/2011

Hole Size: 2 inches

Drill Date: 8/2/2011

Installation Date: 8/2/2011

Datum: GRADE

Sheet: 1 of 1

Borehole Number: JWL-SOIL-18

Project: Jewett White Lead Site (WA # 138)

Client: ERT

Site Location: Staten Island, NY

Lockheed Martin/SERAS

2890 Woodbridge Avenue

Bldg. 209 Annex

Edison, NJ 08837

Enclosure:

Geologist: LA

Depth (feet)	Symbol	Description	Depth (feet)	Elevation (feet)	Water Strikes	Sample Collection Date	Sample location for XRF analysis	Sample location for ICP Sampling
0		Ground Surface						
1		FILL Black and light orange cf SAND, little gray and black cf gravel, tr meadow mat, tr green (serpentine) and black (pyroxene?) mica, tr brown clay, loose, odorless, dry	1.50				JWL-SOIL-18A (0-1')	
2		FILL Orange and gray cf SAND, little gray and black cf gravel, tr meadow mat, tr brown clay, tr green (serpentine) and black (pyroxene?) mica, loose, odorless, dry	3.50			8/3/2011	JWL-SOIL-18B (1-2')	
3			4.00				JWL-SOIL-18C (2-3')	JWL-SOIL-18C
4		FILL Red m DEBRIS (brick fragments), hard, moist at 3.5'	5.00				JWL-SOIL-18D (3-4')	
5		FILL Orange and gray cf SAND, little gray and black cf gravel, tr meadow mat, tr green (serpentine) and black (pyroxene?) mica, tr brown clay, tr cm gray gravel, loose, odorless, moist Possibly dredged spoils	6.00				JWL-SOIL-18E (4-5')	
6		FILL Light green and gray c SAND, some green and gray c gravel, tr brown clay, odorless, wet at 4.5' Possibly dredged spoils	6.50				JWL-SOIL-18F (5-6')	
7		FILL Brown and gray plastic and soft CLAY, tr brown vf gravel, tr organic matter, wet Possibly dredged soils	8.00			8/3/2011	JWL-SOIL-18G (6-7')	
8		ORGANIC MATERIAL Yellow ORGANIC MATERIAL, some gray clay, little gray f silt, strong sulfidic odor, wet End of boring at 8'					JWL-SOIL-18H (7-8')	JWL-SOIL-18H
9								
10								

Drill Method: DIRECT PUSH

Drill Date: 8/2/2011

Installed: 8/2/2011

Installation Date: 8/2/2011

Hole Size: 2 inches

Datum: GRADE

Sheet: 1 of 1

Appendix C
Preliminary XRF Screening Results
Jewett White Lead Site 2011 Field Activities
Jewett White Lead Site
Staten Island, New York
December 15, 2011

**Lockheed Martin Information Systems and Global Services
Environmental Services/SERAS
2890 Woodbridge Ave, Building 209 Annex
Edison, NJ 08837-3679
Telephone: 732-321-4200 Facsimile: 732-494-4021**

LOCKHEED MARTIN

DATE: 7-25-11
TO: C. Hawkins U. S. EPA/ERT
Thru: Vinod Kansal, Analytical Section Leader, SERAS *Tan Patel for VK*
FROM: Dennis Kalnicky, SERA's XRF Chemist
SUBJECT: Preliminary Results of Project: Jewett White Lead WA# SER00138

Attached please find the preliminary results of the above referenced project for the following samples.

**NO QC EVALUATION/VALIDATION HAS BEEN PERFORMED
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION**

* Note Telo result tables included, one sorted by location and one sorted by lead (Pb) concentration

CC: Central File # SEB 00138

Vinod Kansal Analytical Section Leader, SERAS

R. Singhvi, U. S. EPA/ERT

C. Gossman Task Leader, SERAS

L. Martin, Hazardous Waste Coordinator, SERAS

Sorted by location

FPXRF Analysis of Metals in Soil
SER00138 Jewitt White Lead

Date Analyzed	XRF ID	SAMPLE ID	LOCATION	XRF Results (mg/Kg)	
				Concentration	RL
22-Jul-11	1A	138-071811-0001	1A	130	60
22-Jul-11	1B	138-071811-0002	1B	U	60
22-Jul-11	2A	138-071811-0003	2A	280	60
22-Jul-11	2B	138-071811-0004	2B	140	60
22-Jul-11	2C	138-071811-0005	2C	160	60
22-Jul-11	2D	138-071811-0006	2D	160	60
22-Jul-11	2E	138-071811-0007	2E	190	60
22-Jul-11	2F	138-071811-0008	2F	210	60
22-Jul-11	2G	138-071811-0009	2G	160	60
22-Jul-11	2H	138-071811-0010	2H	210	60
22-Jul-11	3 SURFACE	138-071811-0011	3 SURFACE	250	60
22-Jul-11	3A	138-071811-0012	3A	280	60
22-Jul-11	3B	138-071811-0013	3B	140	60
22-Jul-11	3BDUP	138-071811-0013	3B	160	60
22-Jul-11	3C	138-071811-0014	3C	91	60
22-Jul-11	3D	138-071811-0015	3D	120	60
22-Jul-11	3E	138-071811-0016	3E	230	60
22-Jul-11	3F	138-071811-0017	3F	4100	60
22-Jul-11	3G	138-071811-0018	3G	850	60
22-Jul-11	3H	138-071811-0019	3H	2200	60
22-Jul-11	4A	138-071811-0020	4A	250	60
22-Jul-11	4B	138-071811-0021	4B	520	60
22-Jul-11	4C	138-071811-0022	4C	4200	60
22-Jul-11	4D	138-071811-0023	4D	9200	60
22-Jul-11	4E	138-071811-0024	4E	4400	60
22-Jul-11	4F	138-071811-0025	4F	15000	60
22-Jul-11	4FDUP	138-071811-0025	4F	16000	60
22-Jul-11	4G	138-071811-0026	4G	5600	60
22-Jul-11	4H	138-071811-0027	4H	480	60
22-Jul-11	5A	138-071811-0028	5A	1500	60
22-Jul-11	5B	138-071811-0029	5B	640	60
22-Jul-11	5C	138-071811-0030	5C	270	60
22-Jul-11	5D	138-071811-0031	5D	410	60
22-Jul-11	5E	138-071811-0032	5E	1400	60
22-Jul-11	5F	138-071811-0033	5F	3700	60
22-Jul-11	5G	138-071811-0034	5G	4700	60
22-Jul-11	5H	138-071811-0035	5H	23000	60
22-Jul-11	6A	138-071811-0036	6A	530	60
22-Jul-11	6B	138-071811-0037	6B	2600	60
22-Jul-11	6C	138-071811-0038	6C	2400	60
22-Jul-11	6CDUP	138-071811-0038	6C	2500	60
22-Jul-11	6D	138-071811-0039	6D	2300	60
22-Jul-11	6E	138-071811-0040	6E	4900	60
22-Jul-11	6F	138-071811-0041	6F	35000	60
22-Jul-11	6G	138-071811-0042	6G	8700	60
22-Jul-11	6H	138-071811-0043	6H	1700	60
22-Jul-11	7A	138-071811-0044	7A	170	60
22-Jul-11	7B	138-071811-0045	7B	2700	60
22-Jul-11	7C	138-071811-0046	7C	6500	60
22-Jul-11	7CDUP	138-071811-0046	7C	6900	60
22-Jul-11	7D	138-071811-0047	7D	8300	60
22-Jul-11	7E	138-071811-0048	7E	11000	60
22-Jul-11	7F	138-071811-0049	7F	25000	60
22-Jul-11	7G	138-071811-0050	7G	43000	60
22-Jul-11	7GDUP	138-071811-0050	7G	44000	60
22-Jul-11	7H	138-071811-0051	7H	36000	60
22-Jul-11	8A	138-071811-0052	8A	1800	60
22-Jul-11	8B	138-071811-0053	8B	3600	60
22-Jul-11	8C	138-071811-0054	8C	5700	60
22-Jul-11	8D	138-071811-0055	8D	6300	60
22-Jul-11	8E	138-071811-0056	8E	7600	60
22-Jul-11	8F	138-071811-0057	8F	15000	60
22-Jul-11	8G	138-071811-0058	8G	14000	60
22-Jul-11	8H	138-071811-0059	8H	19000	60
22-Jul-11	9A	138-071811-0060	9A	3200	60
22-Jul-11	9B	138-071811-0061	9B	5800	60

FPXRF Analysis of Metals in Soil
SER00138 Jewitt White Lead

Sortail by location

Date Analyzed	XRF ID	SAMPLE ID	LOCATION	XRF Results (mg/Kg)	
				Lead (Pb) Concentration	RL
22-Jul-11	9C	138-071811-0062	9C	16000	60
22-Jul-11	9D	138-071811-0063	9D	730	60
22-Jul-11	9DDUP	138-071811-0063	9D	710	60
22-Jul-11	9E	138-071811-0064	9E	18000	60
22-Jul-11	9F	138-071811-0065	9F	1500	60
22-Jul-11	9G	138-071811-0066	9G	500	60
22-Jul-11	9H	138-071811-0067	9H	970	60
25-Jul-11	10A	138-071811-0068	10A	1400	60
25-Jul-11	10B	138-071811-0069	10B	6000	60
25-Jul-11	10C	138-071811-0070	10C	1300	60
22-Jul-11	10D	138-071811-0071	10D	3600	60
25-Jul-11	10E	138-071811-0072	10E	2200	60
25-Jul-11	10F	138-071811-0073	10F	3900	60
25-Jul-11	10G	138-071811-0074	10G	2400	60
25-Jul-11	10H	138-071811-0075	10H	4600	60
25-Jul-11	10HDUP	138-071811-0075	10H	4000	60
22-Jul-11	11A	138-071811-0076	11A	1400	60
25-Jul-11	11B	138-071811-0077	11B	2900	60
25-Jul-11	11C	138-071811-0078	11C	12000	60
25-Jul-11	11D	138-071811-0079	11D	5600	60
22-Jul-11	11E	138-071811-0080	11E	6400	60
25-Jul-11	11F	138-071811-0081	11F	6800	60
25-Jul-11	11G	138-071811-0082	11G	8600	60
25-Jul-11	11H	138-071811-0083	11H	5400	60
25-Jul-11	12A	138-071811-0084	12A	300	60
25-Jul-11	12B	138-071811-0085	12B	1600	60
22-Jul-11	12C	138-071811-0086	12C	1900	60
25-Jul-11	12D	138-071811-0087	12D	1600	60
25-Jul-11	12DDUP	138-071811-0087	12D	1700	60
25-Jul-11	12E	138-071811-0088	12E	2100	60
25-Jul-11	12F	138-071811-0089	12F	1300	60
22-Jul-11	12G	138-071811-0090	12G	380	60
25-Jul-11	12H	138-071811-0091	12H	540	60
25-Jul-11	13A	138-071811-0092	13A	640	60
25-Jul-11	13B	138-071811-0093	13B	11000	60
25-Jul-11	13C	138-071811-0094	13C	600	60
25-Jul-11	13D	138-071811-0095	13D	570	60
22-Jul-11	13E	138-071811-0096	13E	570	60
22-Jul-11	13EDUP	138-071811-0096	13E	740	60
25-Jul-11	13F	138-071811-0097	13F	580	60
25-Jul-11	13G	138-071811-0098	13G	410	60
25-Jul-11	13H	138-071811-0099	13H	66	60
25-Jul-11	FD1-2C	138-071811-0100	FD1-2C	160	60
25-Jul-11	FD1-2CDUP	138-071811-0100	FD1-2C	200	60

RL - Reporting Level

DUP - Preparation Duplicate

NITON XLt792YW FPXDRF unit, S/N 8262

Measurement time: Filt1 = 120 sec, Filt2 = 30 sec (total 150 seconds)

*Sorted by
Pb Concentration*

FPXRF Analysis of Metals in Soil
SER00138 Jewitt White Lead

Date Analyzed	XRF ID	SAMPLE ID	LOCATION	XRF Results (mg/Kg)	
				Lead (Pb) Concentration	RL
22-Jul-11	1B	138-071811-0002	1B	U	60
25-Jul-11	13H	138-071811-0099	13H	66	60
22-Jul-11	3C	138-071811-0014	3C	91	60
22-Jul-11	3D	138-071811-0015	3D	120	60
22-Jul-11	1A	138-071811-0001	1A	130	60
22-Jul-11	2B	138-071811-0004	2B	140	60
22-Jul-11	3B	138-071811-0013	3B	140	60
22-Jul-11	2C	138-071811-0005	2C	160	60
22-Jul-11	2D	138-071811-0006	2D	160	60
22-Jul-11	2G	138-071811-0009	2G	160	60
22-Jul-11	3BDUP	138-071811-0013	3B	160	60
25-Jul-11	FD1-2C	138-071811-0100	FD1-2C	160	60
22-Jul-11	7A	138-071811-0044	7A	170	60
22-Jul-11	2E	138-071811-0007	2E	190	60
25-Jul-11	FD1-2CDUP	138-071811-0100	FD1-2C	200	60
22-Jul-11	2F	138-071811-0008	2F	210	60
22-Jul-11	2H	138-071811-0010	2H	210	60
22-Jul-11	3E	138-071811-0016	3E	230	60
22-Jul-11	3 SURFACE	138-071811-0011	3 SURFACE	250	60
22-Jul-11	4A	138-071811-0020	4A	250	60
22-Jul-11	5C	138-071811-0030	5C	270	60
22-Jul-11	2A	138-071811-0003	2A	280	60
22-Jul-11	3A	138-071811-0012	3A	280	60
25-Jul-11	12A	138-071811-0084	12A	300	60
22-Jul-11	12G	138-071811-0090	12G	380	60
22-Jul-11	5D	138-071811-0031	5D	410	60
25-Jul-11	13G	138-071811-0098	13G	410	60
22-Jul-11	4H	138-071811-0027	4H	480	60
22-Jul-11	9G	138-071811-0066	9G	500	60
22-Jul-11	4B	138-071811-0021	4B	520	60
22-Jul-11	6A	138-071811-0036	6A	530	60
25-Jul-11	12H	138-071811-0091	12H	540	60
25-Jul-11	13D	138-071811-0095	13D	570	60
22-Jul-11	13E	138-071811-0096	13E	570	60
25-Jul-11	13F	138-071811-0097	13F	580	60
25-Jul-11	13C	138-071811-0094	13C	600	60
22-Jul-11	5B	138-071811-0029	5B	640	60
25-Jul-11	13A	138-071811-0092	13A	640	60
22-Jul-11	9DDUP	138-071811-0063	9D	710	60
22-Jul-11	9D	138-071811-0063	9D	730	60
22-Jul-11	13EDUP	138-071811-0096	13E	740	60
22-Jul-11	3G	138-071811-0018	3G	850	60
22-Jul-11	9H	138-071811-0067	9H	970	60
25-Jul-11	10C	138-071811-0070	10C	1300	60
25-Jul-11	12F	138-071811-0089	12F	1300	60
22-Jul-11	5E	138-071811-0032	5E	1400	60
25-Jul-11	10A	138-071811-0068	10A	1400	60
22-Jul-11	11A	138-071811-0076	11A	1400	60
22-Jul-11	5A	138-071811-0028	5A	1500	60
22-Jul-11	9F	138-071811-0065	9F	1500	60
25-Jul-11	12B	138-071811-0085	12B	1600	60
25-Jul-11	12D	138-071811-0087	12D	1600	60
22-Jul-11	6H	138-071811-0043	6H	1700	60
25-Jul-11	12DDUP	138-071811-0087	12D	1700	60
22-Jul-11	8A	138-071811-0052	8A	1800	60
22-Jul-11	12C	138-071811-0086	12C	1900	60
25-Jul-11	12E	138-071811-0088	12E	2100	60
22-Jul-11	3H	138-071811-0019	3H	2200	60
25-Jul-11	10E	138-071811-0072	10E	2200	60
22-Jul-11	6D	138-071811-0039	6D	2300	60
22-Jul-11	6C	138-071811-0038	6C	2400	60
25-Jul-11	10G	138-071811-0074	10G	2400	60
22-Jul-11	6CDUP	138-071811-0038	6C	2500	60
22-Jul-11	6B	138-071811-0037	6B	2600	60
22-Jul-11	7B	138-071811-0045	7B	2700	60
25-Jul-11	11B	138-071811-0077	11B	2900	60

FPXRF Analysis of Metals in Soil
SER00138 Jewitt White Lead

*Sorted by
Pb Concentration*

Date Analyzed	XRF ID	SAMPLE ID	LOCATION	XRF Results (mg/Kg)	
				Lead (Pb) Concentration	RL
22-Jul-11	9A	138-071811-0060	9A	3200	60
22-Jul-11	8B	138-071811-0053	8B	3600	60
22-Jul-11	10D	138-071811-0071	10D	3600	60
22-Jul-11	5F	138-071811-0033	5F	3700	60
25-Jul-11	10F	138-071811-0073	10F	3900	60
25-Jul-11	10HDUP	138-071811-0075	10H	4000	60
22-Jul-11	3F	138-071811-0017	3F	4100	60
22-Jul-11	4C	138-071811-0022	4C	4200	60
22-Jul-11	4E	138-071811-0024	4E	4400	60
25-Jul-11	10H	138-071811-0075	10H	4600	60
22-Jul-11	5G	138-071811-0034	5G	4700	60
22-Jul-11	6E	138-071811-0040	6E	4900	60
25-Jul-11	11H	138-071811-0083	11H	5400	60
22-Jul-11	4G	138-071811-0026	4G	5600	60
25-Jul-11	11D	138-071811-0079	11D	5600	60
22-Jul-11	8C	138-071811-0054	8C	5700	60
22-Jul-11	9B	138-071811-0061	9B	5800	60
25-Jul-11	10B	138-071811-0069	10B	6000	60
22-Jul-11	8D	138-071811-0055	8D	6300	60
22-Jul-11	11E	138-071811-0080	11E	6400	60
22-Jul-11	7C	138-071811-0046	7C	6500	60
25-Jul-11	11F	138-071811-0081	11F	6800	60
22-Jul-11	7CDUP	138-071811-0046	7C	6900	60
22-Jul-11	8E	138-071811-0056	8E	7600	60
22-Jul-11	7D	138-071811-0047	7D	8300	60
25-Jul-11	11G	138-071811-0082	11G	8600	60
22-Jul-11	6G	138-071811-0042	6G	8700	60
22-Jul-11	4D	138-071811-0023	4D	9200	60
22-Jul-11	7E	138-071811-0048	7E	11000	60
25-Jul-11	13B	138-071811-0093	13B	11000	60
25-Jul-11	11C	138-071811-0078	11C	12000	60
22-Jul-11	8G	138-071811-0058	8G	14000	60
22-Jul-11	4F	138-071811-0025	4F	15000	60
22-Jul-11	8F	138-071811-0057	8F	15000	60
22-Jul-11	4FDUP	138-071811-0025	4F	16000	60
22-Jul-11	9C	138-071811-0062	9C	16000	60
22-Jul-11	9E	138-071811-0064	9E	18000	60
22-Jul-11	8H	138-071811-0059	8H	19000	60
22-Jul-11	5H	138-071811-0035	5H	23000	60
22-Jul-11	7F	138-071811-0049	7F	25000	60
22-Jul-11	6F	138-071811-0041	6F	35000	60
22-Jul-11	7H	138-071811-0051	7H	36000	60
22-Jul-11	7G	138-071811-0050	7G	43000	60
22-Jul-11	7GDUP	138-071811-0050	7G	44000	60

RL - Reporting Level, U - Not Detected, less than the RL

DUP - Preparation Duplicate

NITON XL1792YW FPXDRF unit, S/N 8262

Measurement time: Filt1 = 120 sec, Filt2 = 30 sec (total 150 seconds)

PERCENT TOTAL SOLIDS
SER00138 Jewitt White Lead Site

SAMPLE ID	LOCATION	% Solids
138-071811-0005	2C	81
138-071811-0010	2H	75
138-071811-0011	3 SURFACE	99
138-071811-0016	3E	88
138-071811-0021	4B	89
138-071811-0026	4G	53
138-071811-0031	5D	90
138-071811-0036	6A	96
138-071811-0041	6F	45
138-071811-0046	7C	78
138-071811-0051	7H	33
138-071811-0056	8E	70
138-071811-0061	9B	71
138-071811-0066	9G	78
138-071811-0071	10D	78
138-071811-0076	11A	88
138-071811-0080	11E	78
138-071811-0086	12C	89
138-071811-0090	12G	89
138-071811-0096	13E	78

USEPA

DateShipped: 7/20/2011

CarrierName:

AirbillNo:

WOF# R107003

CHAIN OF CUSTODY RECORD

Jewett White Lead/NJ

Contact Name: Chris Gussman

Contact Phone: 732-321-4237

No: 2-072011-131919-0001

Cooler #:

Lab: SERAS

Lab Phone: 732-321-4200

Lab #	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time	Container	Preservative
01	138-071811-0001	JWL-Soil-1	A	XRF-Pb	Soil	7/18/2011	11:30	4 oz. glass	4 C
02	138-071811-0002	JWL-Soil-1	B	XRF-Pb	Soil	7/18/2011	11:30	4 oz. glass	4 C
03	138-071811-0003	JWL-Soil-2	A	XRF-Pb	Soil	7/18/2011	11:10	4 oz. glass	4 C
04	138-071811-0004	JWL-Soil-2	B	XRF-Pb	Soil	7/18/2011	11:10	4 oz. glass	4 C
05	138-071811-0005	JWL-Soil-2	C	XRF-Pb % solid	Soil	7/18/2011	11:10	4 oz. glass	4 C
06	138-071811-0006	JWL-Soil-2	D	XRF-Pb	Soil	7/18/2011	11:10	4 oz. glass	4 C
07	138-071811-0007	JWL-Soil-2	E	XRF-Pb	Soil	7/18/2011	11:15	4 oz. glass	4 C
08	138-071811-0008	JWL-Soil-2	F	XRF-Pb	Soil	7/18/2011	11:15	4 oz. glass	4 C
09	138-071811-0009	JWL-Soil-2	G	XRF-Pb	Soil	7/18/2011	11:15	4 oz. glass	4 C
10	138-071811-0010	JWL-Soil-2	H	XRF-Pb % solid	Soil	7/18/2011	11:15	4 oz. glass	4 C
11	138-071811-0011	JWL-Soil-3	Surface	XRF-Pb % solid	Soil	7/18/2011	11:05	4 oz. glass	4 C
12	138-071811-0012	JWL-Soil-3	A	XRF-Pb	Soil	7/18/2011	10:50	4 oz. glass	4 C
13	138-071811-0013	JWL-Soil-3	B	XRF-Pb	Soil	7/18/2011	10:50	4 oz. glass	4 C
14	138-071811-0014	JWL-Soil-3	C	XRF-Pb	Soil	7/18/2011	10:50	4 oz. glass	4 C
15	138-071811-0015	JWL-Soil-3	D	XRF-Pb	Soil	7/18/2011	10:50	4 oz. glass	4 C
16	138-071811-0016	JWL-Soil-3	E	XRF-Pb % solid	Soil	7/18/2011	11:00	4 oz. glass	4 C
17	138-071811-0017	JWL-Soil-3	F	XRF-Pb	Soil	7/18/2011	11:00	4 oz. glass	4 C
18	138-071811-0018	JWL-Soil-3	G	XRF-Pb	Soil	7/18/2011	11:00	4 oz. glass	4 C
19	138-071811-0019	JWL-Soil-3	H	XRF-Pb	Soil	7/18/2011	11:00	4 oz. glass	4 C
20	138-071811-0020	JWL-Soil-4	A	XRF-Pb	Soil	7/18/2011	11:55	4 oz. glass	4 C

Special Instructions: The following samples require percent solid determination:

0005, 0010, 0011, 0016, 0021, 0026, 0031, 0036, 0041, 0046, 0051, 0056, 0061, 0066, 0071, 0076, 0080, 0086, 0090, 0096

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

Received 40C pm

7/20/11

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All / Analys	Ken G	7/20/11	Jimmy H	7/20/11	14:35	All / Analys	Metal	7/20/11	Jimmy H	7/20/11	16:00

USEPA

DateShipped: 7/20/2011

CarrierName:

AirbillNo:

W0FF R107003

Lab #	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time	Container	Preservative
21	138-071811-0021	JWL-Soil-4	B	XRF-Pb % solid	Soil	7/18/2011	11:55	4 oz. glass	4 C
22	138-071811-0022	JWL-Soil-4	C	XRF-Pb	Soil	7/18/2011	11:55	4 oz. glass	4 C
23	138-071811-0023	JWL-Soil-4	D	XRF-Pb	Soil	7/18/2011	11:55	4 oz. glass	4 C
24	138-071811-0024	JWL-Soil-4	E	XRF-Pb	Soil	7/18/2011	12:05	4 oz. glass	4 C
25	138-071811-0025	JWL-Soil-4	F	XRF-Pb	Soil	7/18/2011	12:05	4 oz. glass	4 C
26	138-071811-0026	JWL-Soil-4	G	XRF-Pb % solid	Soil	7/18/2011	12:05	4 oz. glass	4 C
27	138-071811-0027	JWL-Soil-4	H	XRF-Pb	Soil	7/18/2011	12:05	4 oz. glass	4 C
28	138-071811-0028	JWL-Soil-5	A	XRF-Pb	Soil	7/18/2011	10:25	4 oz. glass	4 C
29	138-071811-0029	JWL-Soil-5	B	XRF-Pb	Soil	7/18/2011	10:25	4 oz. glass	4 C
30	138-071811-0030	JWL-Soil-5	C	XRF-Pb	Soil	7/18/2011	10:25	4 oz. glass	4 C
31	138-071811-0031	JWL-Soil-5	D	XRF-Pb % solid	Soil	7/18/2011	10:25	4 oz. glass	4 C
32	138-071811-0032	JWL-Soil-5	E	XRF-Pb	Soil	7/18/2011	10:30	4 oz. glass	4 C
33	138-071811-0033	JWL-Soil-5	F	XRF-Pb	Soil	7/18/2011	10:30	4 oz. glass	4 C
34	138-071811-0034	JWL-Soil-5	G	XRF-Pb	Soil	7/18/2011	10:30	4 oz. glass	4 C
35	138-071811-0035	JWL-Soil-5	H	XRF-Pb	Soil	7/18/2011	10:30	4 oz. glass	4 C
36	138-071811-0036	JWL-Soil-6	A	XRF-Pb % solid	Soil	7/18/2011	12:40	4 oz. glass	4 C
37	138-071811-0037	JWL-Soil-6	B	XRF-Pb	Soil	7/18/2011	12:40	4 oz. glass	4 C
38	138-071811-0038	JWL-Soil-6	C	XRF-Pb	Soil	7/18/2011	12:40	4 oz. glass	4 C
39	138-071811-0039	JWL-Soil-6	D	XRF-Pb	Soil	7/18/2011	12:40	4 oz. glass	4 C
40	138-071811-0040	JWL-Soil-6	E	XRF-Pb	Soil	7/18/2011	12:45	4 oz. glass	4 C

Special Instructions: The following samples require percent solid determination:

0005, 0010, 0011, 0016, 0021, 0026, 0031, 0036, 0041, 0046, 0051, 0056, 0061, 0066, 0071, 0076, 0080, 0086, 0090, 0096

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

Received 40C

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All Analyses	<i>John D.</i>	7/21/11	<i>Tony Morris</i>	7/21/11	14:35	All Metal Analysis	<i>Tony Morris</i>	7/20/11	<i>Deborah</i>	7/20/11	1630

USEPA

DateShipped: 7/20/2011

CarrierName:

AirbillNo:

WOF# R107003

Lab # Sample #

Lab #	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time	Container	Preservative
41	138-071811-0041	JWL-Soil-6	F	XRF-Pb % solid	Soil	7/18/2011	12:45	4 oz. glass	4 C
42	138-071811-0042	JWL-Soil-6	G	XRF-Pb	Soil	7/18/2011	12:45	4 oz. glass	4 C
43	138-071811-0043	JWL-Soil-6	H	XRF-Pb	Soil	7/18/2011	12:45	4 oz. glass	4 C
44	138-071811-0044	JWL-Soil-7	A	XRF-Pb	Soil	7/18/2011	12:50	4 oz. glass	4 C
45	138-071811-0045	JWL-Soil-7	B	XRF-Pb	Soil	7/18/2011	12:50	4 oz. glass	4 C
46	138-071811-0046	JWL-Soil-7	C	XRF-Pb % solid	Soil	7/18/2011	12:50	4 oz. glass	4 C
47	138-071811-0047	JWL-Soil-7	D	XRF-Pb	Soil	7/18/2011	12:50	4 oz. glass	4 C
48	138-071811-0048	JWL-Soil-7	E	XRF-Pb	Soil	7/18/2011	12:55	4 oz. glass	4 C
49	138-071811-0049	JWL-Soil-7	F	XRF-Pb	Soil	7/18/2011	12:55	4 oz. glass	4 C
50	138-071811-0050	JWL-Soil-7	G	XRF-Pb	Soil	7/18/2011	12:55	4 oz. glass	4 C
51	138-071811-0051	JWL-Soil-7	H	XRF-Pb % solid	Soil	7/18/2011	12:55	4 oz. glass	4 C
52	138-071811-0052	JWL-Soil-8	A	XRF-Pb	Soil	7/18/2011	12:55	4 oz. glass	4 C
53	138-071811-0053	JWL-Soil-8	B	XRF-Pb	Soil	7/18/2011	10:00	4 oz. glass	4 C
54	138-071811-0054	JWL-Soil-8	C	XRF-Pb	Soil	7/18/2011	10:00	4 oz. glass	4 C
55	138-071811-0055	JWL-Soil-8	D	XRF-Pb	Soil	7/18/2011	10:00	4 oz. glass	4 C
56	138-071811-0056	JWL-Soil-8	E	XRF-Pb % solid	Soil	7/18/2011	10:00	4 oz. glass	4 C
57	138-071811-0057	JWL-Soil-8	F	XRF-Pb	Soil	7/18/2011	10:05	4 oz. glass	4 C
58	138-071811-0058	JWL-Soil-8	G	XRF-Pb	Soil	7/18/2011	10:05	4 oz. glass	4 C
59	138-071811-0059	JWL-Soil-8	H	XRF-Pb	Soil	7/18/2011	10:05	4 oz. glass	4 C
60	138-071811-0060	JWL-Soil-9	A	XRF-Pb	Soil	7/18/2011	13:10	4 oz. glass	4 C

Special Instructions: The following samples require percent solid determination:

0005, 0010, 0011, 0016, 0021, 0026, 0031, 0036, 0041, 0046, 0051, 0056, 0061, 0066, 0071, 0076, 0080, 0086, 0090, 0096

**SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #**

Received 40C 7/20/11

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All / Analysis	John Doe	7/20/11	Tommy Hartley	7/20/11	14:35	All/Metals Analysis	Tommy Hartley	7/20/11	Alvarez	7/20/11	16:30

USEPA

DateShipped: 7/20/2011

CarrierName:

AirbillNo:

W0FFR107003

CHAIN OF CUSTODY RECORD

Jewett White Lead/NJ

Contact Name: Chris Gussman

Contact Phone: 732-321-4237

No: 2-072011-131919-0001

Cooler #:

Lab: SERAS

Lab Phone: 732-321-4200

Lab #	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time	Container	Preservative
61	138-071811-0061	JWL-Soil-9	B	XRF-Pb % solid	Soil	7/18/2011	13:10	4 oz. glass	4 C
62	138-071811-0062	JWL-Soil-9	C	XRF-Pb	Soil	7/18/2011	13:10	4 oz. glass	4 C
63	138-071811-0063	JWL-Soil-9	D	XRF-Pb	Soil	7/18/2011	13:10	4 oz. glass	4 C
64	138-071811-0064	JWL-Soil-9	E	XRF-Pb	Soil	7/18/2011	13:10	4 oz. glass	4 C
65	138-071811-0065	JWL-Soil-9	F	XRF-Pb	Soil	7/18/2011	13:15	4 oz. glass	4 C
66	138-071811-0066	JWL-Soil-9	G	XRF-Pb % solid	Soil	7/18/2011	13:15	4 oz. glass	4 C
67	138-071811-0067	JWL-Soil-9	H	XRF-Pb	Soil	7/18/2011	13:15	4 oz. glass	4 C
68	138-071811-0068	JWL-Soil-10	A	XRF-Pb	Soil	7/18/2011	13:40	4 oz. glass	4 C
69	138-071811-0069	JWL-Soil-10	B	XRF-Pb	Soil	7/18/2011	13:40	4 oz. glass	4 C
70	138-071811-0070	JWL-Soil-10	C	XRF-Pb	Soil	7/18/2011	13:40	4 oz. glass	4 C
71	138-071811-0071	JWL-Soil-10	D	XRF-Pb % solid	Soil	7/18/2011	13:40	4 oz. glass	4 C
72	138-071811-0072	JWL-Soil-10	E	XRF-Pb	Soil	7/18/2011	13:40	4 oz. glass	4 C
73	138-071811-0073	JWL-Soil-10	F	XRF-Pb	Soil	7/18/2011	13:45	4 oz. glass	4 C
74	138-071811-0074	JWL-Soil-10	G	XRF-Pb	Soil	7/18/2011	13:45	4 oz. glass	4 C
75	138-071811-0075	JWL-Soil-10	H	XRF-Pb	Soil	7/18/2011	13:45	4 oz. glass	4 C
76	138-071811-0076	JWL-Soil-11	A	XRF-Pb % solid	Soil	7/18/2011	09:45	4 oz. glass	4 C
77	138-071811-0077	JWL-Soil-11	B	XRF-Pb	Soil	7/18/2011	09:45	4 oz. glass	4 C
78	138-071811-0078	JWL-Soil-11	C	XRF-Pb	Soil	7/18/2011	09:45	4 oz. glass	4 C
79	138-071811-0079	JWL-Soil-11	D	XRF-Pb	Soil	7/18/2011	09:45	4 oz. glass	4 C
80	138-071811-0080	JWL-Soil-11	E	XRF-Pb % solid	Soil	7/18/2011	09:50	4 oz. glass	4 C

Special Instructions: The following samples require percent solid determination:

0005, 0010, 0011, 0016, 0021, 0026, 0031, 0036, 0041, 0046, 0051, 0056, 0061, 0066, 0071, 0076, 0080, 0086, 0090, 0096

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

Received 40Cm

7/20/11

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
A1 A2-A4	[Signature]	7/20/11	Tony Foster	7/20/11	14:35	All Analysis	Tony Foster	7/20/11	Al Melody	7/20/11	1630

USEPA

DateShipped: 7/20/2011

CarrierName:

AirbillNo:

WGT# R107003

Lab #

Sample #

Location

Sub Location

CHAIN OF CUSTODY RECORD

Jewett White Lead/NJ

Contact Name: Chris Gussman

Contact Phone: 732-321-4237

No: 2-072011-131919-0001

Cooler #:

Lab: SERAS

Lab Phone: 732-321-4200

Lab #	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time	Container	Preservative
81	138-071811-0081	JWL-Soil-11	F	XRF-Pb	Soil	7/18/2011	09:50	4 oz. glass	4 C
82	138-071811-0082	JWL-Soil-11	G	XRF-Pb	Soil	7/18/2011	09:50	4 oz. glass	4 C
83	138-071811-0083	JWL-Soil-11	H	XRF-Pb	Soil	7/18/2011	09:50	4 oz. glass	4 C
84	138-071811-0084	JWL-Soil-12	A	XRF-Pb	Soil	7/18/2011	09:50	4 oz. glass	4 C
85	138-071811-0085	JWL-Soil-12	B	XRF-Pb	Soil	7/18/2011	14:05	4 oz. glass	4 C
86	138-071811-0086	JWL-Soil-12	C	XRF-Pb % solid	Soil	7/18/2011	14:05	4 oz. glass	4 C
87	138-071811-0087	JWL-Soil-12	D	XRF-Pb	Soil	7/18/2011	14:05	4 oz. glass	4 C
88	138-071811-0088	JWL-Soil-12	E	XRF-Pb	Soil	7/18/2011	14:05	4 oz. glass	4 C
89	138-071811-0089	JWL-Soil-12	F	XRF-Pb	Soil	7/18/2011	14:10	4 oz. glass	4 C
90	138-071811-0090	JWL-Soil-12	G	XRF-Pb % solid	Soil	7/18/2011	14:10	4 oz. glass	4 C
91	138-071811-0091	JWL-Soil-12	H	XRF-Pb	Soil	7/18/2011	14:10	4 oz. glass	4 C
92	138-071811-0092	JWL-Soil-13	A	XRF-Pb	Soil	7/18/2011	14:10	4 oz. glass	4 C
93	138-071811-0093	JWL-Soil-13	B	XRF-Pb	Soil	7/18/2011	09:25	4 oz. glass	4 C
94	138-071811-0094	JWL-Soil-13	C	XRF-Pb	Soil	7/18/2011	09:25	4 oz. glass	4 C
95	138-071811-0095	JWL-Soil-13	D	XRF-Pb	Soil	7/18/2011	09:25	4 oz. glass	4 C
96	138-071811-0096	JWL-Soil-13	E	XRF-Pb % solid	Soil	7/18/2011	09:25	4 oz. glass	4 C
97	138-071811-0097	JWL-Soil-13	F	XRF-Pb	Soil	7/18/2011	09:30	4 oz. glass	4 C
98	138-071811-0098	JWL-Soil-13	G	XRF-Pb	Soil	7/18/2011	09:30	4 oz. glass	4 C
99	138-071811-0099	JWL-Soil-13	H	XRF-Pb	Soil	7/18/2011	09:30	4 oz. glass	4 C
100	138-071811-0100	FD-1	JWL-Soil-2C	XRF-Pb	Soil	7/18/2011	11:10	4 oz. glass	4 C

Special Instructions: The following samples require percent solid determination:

0005, 0010, 0011, 0016, 0021, 0026, 0031, 0036, 0041, 0046, 0051, 0056, 0061, 0066, 0071, 0076, 0080, 0086, 0090, 0096

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

Received 40Cpm
7/20/11

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All / metals	MM Juv	7/20/11	Tony Hartin	7/20/11	14:35	All / Metals	Tony Hartin	7/20/11	Marilyn	7/20/11	1630

**Lockheed Martin Information Systems and Global Services
Environmental Services/SERAS
2890 Woodbridge Ave, Building 209 Annex
Edison, NJ 08837-3679
Telephone: 732-321-4200 Facsimile: 732-494-4021**

LOCKHEED MARTIN

DATE: 08-08-11
TO: C. Hawkins U. S. EPA/ERT
Thru: Vinod Kansal, Analytical Section Leader, SERAS Vinod Kansal
FROM: Derrick Kalusky, SERAS XRF Chemist
SUBJECT: Preliminary Results of Project: Jewett White Lead WA# SER00138

Attached please find the preliminary results of the above referenced project for the following samples.

**NO QC EVALUATION/VALIDATION HAS BEEN PERFORMED
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION**

Note: two results tables included, one sorted by location and one sorted by lead (Pb) concentration

CC: Central File # SER 90138

Vinod Kansal Analytical Section Leader, SERAS

R. Singhvi _____, U. S. EPA/ERT

C. Gussman Task Leader, SERAS

L. Martin, Hazardous Waste Coordinator, SERAS

Sorted by location

FPXRF Analysis of Metals in Soil
SER00138 Jewitt White Lead

Date Analyzed	XRF ID	SAMPLE ID	LOCATION	XRF Results (mg/Kg)	
				Lead (Pb)	Concentration
5-Aug-11	14A	138-080211-0001	14A	130	60
5-Aug-11	14B	138-080211-0002	14B	65	60
5-Aug-11	14C	138-080211-0003	14C	U	60
5-Aug-11	14D	138-080211-0004	14D	1300	60
5-Aug-11	14E	138-080211-0005	14E	400	60
5-Aug-11	14F	138-080211-0006	14F	450	60
5-Aug-11	14G	138-080211-0007	14G	90	60
5-Aug-11	14H	138-080211-0008	14H	150	60
5-Aug-11	15A	138-080211-0009	15A	1100	60
5-Aug-11	15B	138-080211-0010	15B	1400	60
5-Aug-11	15C	138-080211-0011	15C	880	60
5-Aug-11	15D	138-080211-0012	15D	200	60
5-Aug-11	15DDUP	138-080211-0012	15D	260	60
5-Aug-11	15E	138-080211-0013	15E	290	60
5-Aug-11	15F	138-080211-0014	15F	72	60
5-Aug-11	15G	138-080211-0015	15G	U	60
5-Aug-11	15H	138-080211-0016	15H	U	60
5-Aug-11	16A	138-080211-0017	16A	530	60
5-Aug-11	16B	138-080211-0018	16B	800	60
5-Aug-11	16C	138-080211-0019	16C	2200	60
5-Aug-11	16D	138-080211-0020	16D	720	60
5-Aug-11	16E	138-080211-0021	16E	530	60
5-Aug-11	16F	138-080211-0022	16F	590	60
5-Aug-11	16G	138-080211-0023	16G	540	60
5-Aug-11	16H	138-080211-0024	16H	640	60
5-Aug-11	16HDUP	138-080211-0024	16H	620	60
5-Aug-11	17A	138-080211-0025	17A	310	60
5-Aug-11	17B	138-080211-0026	17B	260	60
5-Aug-11	17C	138-080211-0027	17C	U	60
5-Aug-11	17D	138-080211-0028	17D	U	60
5-Aug-11	17E	138-080211-0029	17E	88	60
5-Aug-11	17F	138-080211-0030	17F	U	60
5-Aug-11	17G	138-080211-0031	17G	U	60
5-Aug-11	17H	138-080211-0032	17H	U	60
5-Aug-11	18A	138-080211-0033	18A	3000	60
5-Aug-11	18B	138-080211-0034	18B	730	60
5-Aug-11	18C	138-080211-0035	18C	U	60
5-Aug-11	18CDUP	138-080211-0035	18C	U	60
5-Aug-11	18D	138-080211-0036	18D	82	60
5-Aug-11	18E	138-080211-0037	18E	190	60
5-Aug-11	18EDUP	138-080211-0037	18E	220	60
5-Aug-11	18F	138-080211-0038	18F	99	60
5-Aug-11	18G	138-080211-0039	18G	93	60
5-Aug-11	18H	138-080211-0040	18H	65	60
5-Aug-11	FD2-14E	138-080211-0041	FD2-14E	330	60

RL - Reporting Level

DUP - Preparation Duplicate

NITON XLt792YW FPXRF unit, S/N 8262

Measurement time: Filt1 = 120 sec; Filt2 = 30 sec (total 150 sec)

FPXRF Analysis of Metals in Soil
SER00138 Jewitt White Lead

*Sorted by
Pb concentration*

Date Analyzed	XRF ID	SAMPLE ID	LOCATION	XRF Results (mg/Kg)	
				Lead (Pb) Concentration	RL
5-Aug-11	14C	138-080211-0003	14C	U	60
5-Aug-11	15G	138-080211-0015	15G	U	60
5-Aug-11	15H	138-080211-0016	15H	U	60
5-Aug-11	17C	138-080211-0027	17C	U	60
5-Aug-11	17D	138-080211-0028	17D	U	60
5-Aug-11	17F	138-080211-0030	17F	U	60
5-Aug-11	17G	138-080211-0031	17G	U	60
5-Aug-11	17H	138-080211-0032	17H	U	60
5-Aug-11	18C	138-080211-0035	18C	U	60
5-Aug-11	18CDUP	138-080211-0035	18C	U	60
5-Aug-11	14B	138-080211-0002	14B	65	60
5-Aug-11	18H	138-080211-0040	18H	65	60
5-Aug-11	15F	138-080211-0014	15F	72	60
5-Aug-11	18D	138-080211-0036	18D	82	60
5-Aug-11	17E	138-080211-0029	17E	88	60
5-Aug-11	14G	138-080211-0007	14G	90	60
5-Aug-11	18G	138-080211-0039	18G	93	60
5-Aug-11	18F	138-080211-0038	18F	99	60
5-Aug-11	14A	138-080211-0001	14A	130	60
5-Aug-11	14H	138-080211-0008	14H	150	60
5-Aug-11	18E	138-080211-0037	18E	190	60
5-Aug-11	15D	138-080211-0012	15D	200	60
5-Aug-11	18EDUP	138-080211-0037	18E	220	60
5-Aug-11	15DDUP	138-080211-0012	15D	260	60
5-Aug-11	17B	138-080211-0026	17B	260	60
5-Aug-11	15E	138-080211-0013	15E	290	60
5-Aug-11	17A	138-080211-0025	17A	310	60
5-Aug-11	FD2-14E	138-080211-0041	FD2-14E	330	60
5-Aug-11	14E	138-080211-0005	14E	400	60
5-Aug-11	14F	138-080211-0006	14F	450	60
5-Aug-11	16A	138-080211-0017	16A	530	60
5-Aug-11	16E	138-080211-0021	16E	530	60
5-Aug-11	16G	138-080211-0023	16G	540	60
5-Aug-11	16F	138-080211-0022	16F	590	60
5-Aug-11	16HDUP	138-080211-0024	16H	620	60
5-Aug-11	16H	138-080211-0024	16H	640	60
5-Aug-11	16D	138-080211-0020	16D	720	60
5-Aug-11	18B	138-080211-0034	18B	730	60
5-Aug-11	16B	138-080211-0018	16B	800	60
5-Aug-11	15C	138-080211-0011	15C	880	60
5-Aug-11	15A	138-080211-0009	15A	1100	60
5-Aug-11	14D	138-080211-0004	14D	1300	60
5-Aug-11	15B	138-080211-0010	15B	1400	60
5-Aug-11	16C	138-080211-0019	16C	2200	60
5-Aug-11	18A	138-080211-0033	18A	3000	60

RL - Reporting Level

DUP - Preparation Duplicate

NITON XLt792YW FPXRF unit, S/N 8262

Measurement time: Filt1 = 120 sec; Filt2 = 30 sec (total 150 sec)

PERCENT TOTAL SOLIDS
SER00138 Jewitt White Lead Site

SAMPLE ID	LOCATION	% Solids
138-080211-0005	14E	91
138-080211-0010	15B	87
138-080211-0015	15G	83
138-080211-0020	16D	84
138-080211-0025	17A	91
138-080211-0030	17F	82
138-080211-0035	18C	84
138-080211-0040	18H	60
138-080211-0041	FD2-14E	91
138-071811-0100	FD1-2C	82

USEPA

DateShipped: 8/3/2011
CarrierName:
AirbillNo:

CHAIN OF CUSTODY RECORD

Jewett White Lead

Contact Name: Chris G...

Contact Phone: 732-331-4611

No: 2-080311-131731-0003

Cooler #: 1

Lab: SERA-2

Lab. SERAS

Lab. SERAS
Lab Phone: 732-321-4200

Lab #	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time	Container	Preservative
01	138-080211-0001	JWL-Soil-14	A	XRF-Pb	Soil	8/2/2011	11:00	4 oz. glass	4 C
02	138-080211-0002	JWL-Soil-14	B	XRF-Pb	Soil	8/2/2011	11:00	4 oz. glass	4 C
03	138-080211-0003	JWL-Soil-14	C	XRF-Pb	Soil	8/2/2011	11:00	4 oz. glass	4 C
04	138-080211-0004	JWL-Soil-14	D	XRF-Pb	Soil	8/2/2011	11:00	4 oz. glass	4 C
05	138-080211-0005	JWL-Soil-14	E	XRF-Pb % solid	Soil	8/2/2011	11:05	4 oz. glass	4 C
06	138-080211-0006	JWL-Soil-14	F	XRF-Pb	Soil	8/2/2011	11:05	4 oz. glass	4 C
07	138-080211-0007	JWL-Soil-14	G	XRF-Pb	Soil	8/2/2011	11:05	4 oz. glass	4 C
08	138-080211-0008	JWL-Soil-14	H	XRF-Pb	Soil	8/2/2011	11:05	4 oz. glass	4 C
09	138-080211-0009	JWL-Soil-15	A	XRF-Pb	Soil	8/2/2011	11:05	4 oz. glass	4 C
10	138-080211-0010	JWL-Soil-15	B	XRF-Pb % solid	Soil	8/2/2011	11:15	4 oz. glass	4 C
11	138-080211-0011	JWL-Soil-15	C	XRF-Pb	Soil	8/2/2011	11:15	4 oz. glass	4 C
12	138-080211-0012	JWL-Soil-15	D	XRF-Pb	Soil	8/2/2011	11:15	4 oz. glass	4 C
13	138-080211-0013	JWL-Soil-15	E	XRF-Pb	Soil	8/2/2011	11:15	4 oz. glass	4 C
14	138-080211-0014	JWL-Soil-15	F	XRF-Pb	Soil	8/2/2011	11:20	4 oz. glass	4 C
15	138-080211-0015	JWL-Soil-15	G	XRF-Pb % solid	Soil	8/2/2011	11:20	4 oz. glass	4 C
16	138-080211-0016	JWL-Soil-15	H	XRF-Pb	Soil	8/2/2011	11:20	4 oz. glass	4 C
17	138-080211-0017	JWL-Soil-16	A	XRF-Pb	Soil	8/2/2011	11:20	4 oz. glass	4 C
18	138-080211-0018	JWL-Soil-16	B	XRF-Pb	Soil	8/2/2011	10:30	4 oz. glass	4 C
19	138-080211-0019	JWL-Soil-16	C	XRF-Pb	Soil	8/2/2011	10:30	4 oz. glass	4 C
20	138-080211-0020	JWL-Soil-16	D	XRF-Pb % solid	Soil	8/2/2011	10:30	4 oz. glass	4 C

Special Instructions: The following samples require percent solid determination: 0009, 0010, 0015, 0020, 0025, 0030, 0035, 0041

**SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #**

ITEMS TRANSFERRED FROM		CHAIN OF CUSTODY #		
Items/Reason	Relinquished by	Date	Received by	Date
All / Analyzer	By Durr	8/3/11	Received by Terry Portin	Date 8/3/11 Time 15:30
				Items/Reason All / Analysis

USEPA

DateShipped: 8/3/2011

CarrierName:

Airbill No:

WO#R108001

CHAIN OF CUSTODY RECORD

Jewett White Lead

Contact Name: Chris Gussman

Contact Phone: 732-321-4300

No: 2-080311-131731-0003

Cooler #: 1

Lab: SERAS

Lab Phone: 732-321-4200

Lab #	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time	Container	Preservative
21	138-080211-0021	JWL-Soil-16	E	XRF-Pb	Soil	8/2/2011	10:35	4 oz. glass	4 C
22	138-080211-0022	JWL-Soil-16	F	XRF-Pb	Soil	8/2/2011	10:35	4 oz. glass	4 C
23	138-080211-0023	JWL-Soil-16	G	XRF-Pb	Soil	8/2/2011	10:35	4 oz. glass	4 C
24	138-080211-0024	JWL-Soil-16	H	XRF-Pb	Soil	8/2/2011	10:35	4 oz. glass	4 C
25	138-080211-0025	JWL-Soil-17	A	XRF-Pb % solid	Soil	8/2/2011	10:35	4 oz. glass	4 C
26	138-080211-0026	JWL-Soil-17	B	XRF-Pb	Soil	8/2/2011	10:15	4 oz. glass	4 C
27	138-080211-0027	JWL-Soil-17	C	XRF-Pb	Soil	8/2/2011	10:15	4 oz. glass	4 C
28	138-080211-0028	JWL-Soil-17	D	XRF-Pb	Soil	8/2/2011	10:15	4 oz. glass	4 C
29	138-080211-0029	JWL-Soil-17	E	XRF-Pb	Soil	8/2/2011	10:15	4 oz. glass	4 C
30	138-080211-0030	JWL-Soil-17	F	XRF-Pb % solid	Soil	8/2/2011	10:20	4 oz. glass	4 C
31	138-080211-0031	JWL-Soil-17	G	XRF-Pb	Soil	8/2/2011	10:20	4 oz. glass	4 C
32	138-080211-0032	JWL-Soil-17	H	XRF-Pb	Soil	8/2/2011	10:30	4 oz. glass	4 C
33	138-080211-0033	JWL-Soil-18	A	XRF-Pb	Soil	8/2/2011	10:20	4 oz. glass	4 C
34	138-080211-0034	JWL-Soil-18	B	XRF-Pb	Soil	8/2/2011	09:00	4 oz. glass	4 C
35	138-080211-0035	JWL-Soil-18	C	XRF-Pb % solid	Soil	8/2/2011	09:00	4 oz. glass	4 C
36	138-080211-0036	JWL-Soil-18	D	XRF-Pb	Soil	8/2/2011	09:00	4 oz. glass	4 C
37	138-080211-0037	JWL-Soil-18	E	XRF-Pb	Soil	8/2/2011	09:00	4 oz. glass	4 C
38	138-080211-0038	JWL-Soil-18	F	XRF-Pb	Soil	8/2/2011	09:05	4 oz. glass	4 C
39	138-080211-0039	JWL-Soil-18	G	XRF-Pb	Soil	8/2/2011	09:05	4 oz. glass	4 C
40	138-080211-0040	JWL-Soil-18	H	XRF-Pb % solid	Soil	8/2/2011	09:05	4 oz. glass	4 C

Special Instructions: The following samples require percent solid determination: 0010, 0012, 0015, 0020
0041

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

Received on Oct

7m 8131

Received on Ice											
Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All / Analysis	Andy W Amy J	8/3/11	Youngster	8/3/11	15:30	All/Analysis	Youngster	8/4/11	Releasely	8/4/11	085

USEPA

DateShipped: 8/3/2011

CarrierName:

Airbill No:

CHAIN OF CUSTODY RECORD

Jewett White Lead

Contact Name: Chris Gussman

Contact Phone: 732-321-4200

No: 2-080311-131731-0003

Cooler #: 1

Lab: SERAS

Lab Phone: 732-321-4200

Lab #	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time	Container	Preservative
41	138-080211-0041	FD-2	JWL-Soil-14E	XRF-Pb % solid	Soil	8/2/2011	11:05	4 oz. glass	4 C

Special Instructions: The following samples require percent solid determination: 0050, 0010, 0015, 0020, 0025, 0030, 0035, 0040
0041

6

05

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

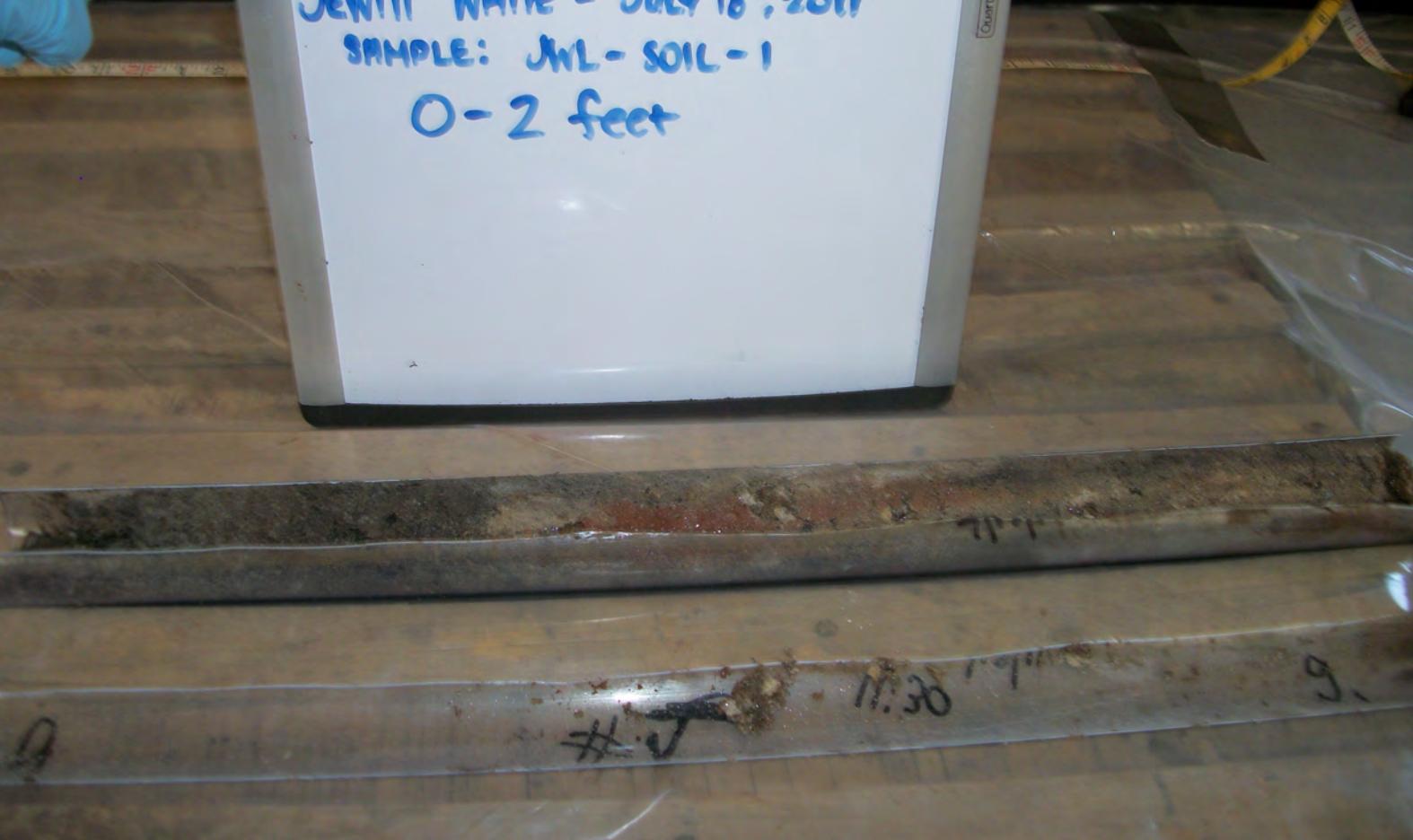
Received on Ice

7M 81311

Appendix D
Soil Core Photographs
Jewett White Lead Site 2011 Field Activities
Jewett White Lead Site
Staten Island, New York
December 15, 2011

JENITT WHITE - July 18, 2011
SAMPLE: JWL-SOIL-1
0-2 feet

Courter



JEWITT WHITE - JULY 16, 2011
SAMPLE: JWL-SOIL-2
0-4 feet

JEWITT WHITE - July 18, 2011
SAMPLE: JWL-SOIL-2
4-8' feet

MS DS

JEWITT WHITE JUly 18,
2011

SAMPLE

JWL-SOIL-03

0-4 feet

JEWITT WHITE JULY 18,
2011

SAMPLE

JWL - SOIL - 03

4 - 8 feet

MS DS

JEWITT WHITE JULY 18,
2011
SAMPLE
JWL-SOIL-04
0-4 feet



JEWITT WHITE JUNIOR,
2011

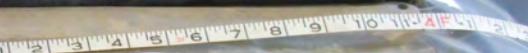
SAMPLE

JWL - SOIL - 04

4 - 8 feet

MS DS

JEWITT WHITE JUNE 18, 2011
SAMPLE
JWL - SOIL - 05
0 - 4 feet



Piramal Glass
knowledge action care
Piramal Glass - USA, Inc.

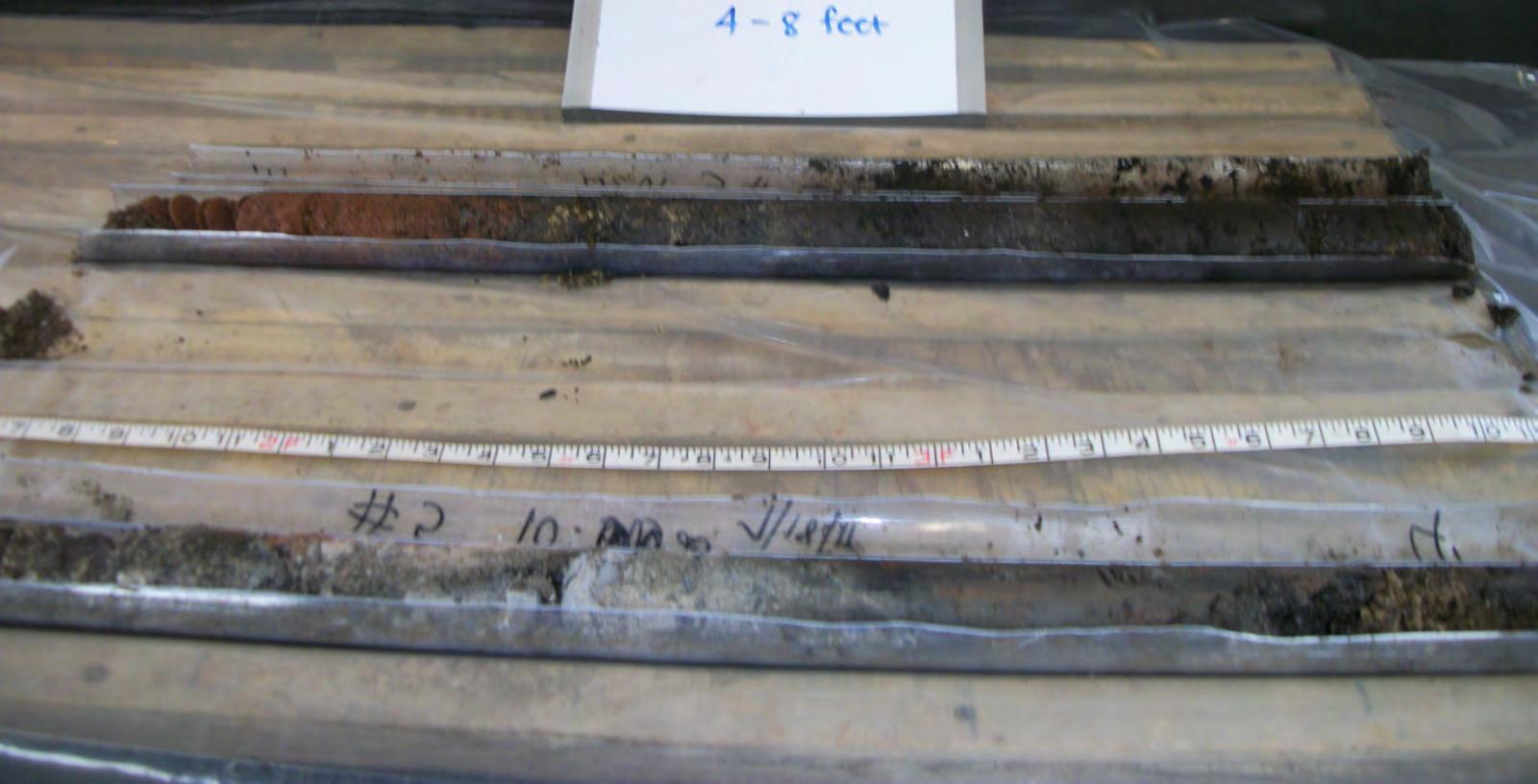
MS DS

JEWITT WHITE JUN 16,
2011

SAMPLE

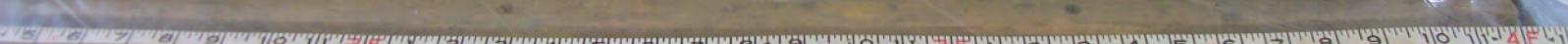
JWL-SOIL-05

4 - 8 feet



MS DS

JEWITT WHITE JUNE 16,
2011
SAMPLE
JWL-SOIL-06
0-4 feet



JEWITT WHITE JULY 18,
2011

SAMPLE

JWL - SOIL - 06

4 - 8 foot

X 16 12.40 7.511

10 11 12 F 1 2 3 4 5 6 7 8 9

MS DS

JEWITT WHITE JUNE R.
2011
SAMPLE
JWL-SOIL-07
0-4 feet

MS DS

JEWITT WHITE JULY 18,
2011
SAMPLE
JWL-SOIL-07
4 - 8 feet



QUIPMENT

MS DS

JEWITT WHITE JUN 10,
2011

SAMPLE

JWL-SOIL-08

0-4 feet

#0 10:00

4

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

JEWITT WHITE JULY 18,
2011

SAMPLE

JWL-SOIL-08

4 - 8 feet

3 4 5 6 7 8 9 10 11 3F 1 2 3 4 5 3F 6 7 8 9 10 11 4F

MSDS

JEWETT WHITE JULY 18, 2011

SAMPLE #

JWL-SOIL-09

0 - 4 feet



MS DS

JEWETT WHITE July 18, 2011
SAMPLE #
JWL-SOIL-09
4-8 feet



MS DS

JEWETT WHITE JUNE 18, 2011
SAMPLE #10
JWL - SOIL - 10
0 - 4 feet

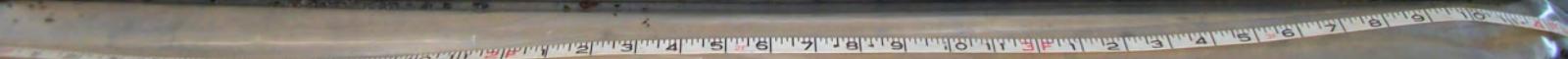


JEWETT WHITE JULY 18, 2011
SAMPLE #
JWL-SOIL-10
4-8 feet



MS DS

JEWETT WHITE JULY 18, 2011
SAMPLE #
JWL-SOIL-11
0 - 4 feet



JEWETT WHITE July 18, 2011

SAMPLE #

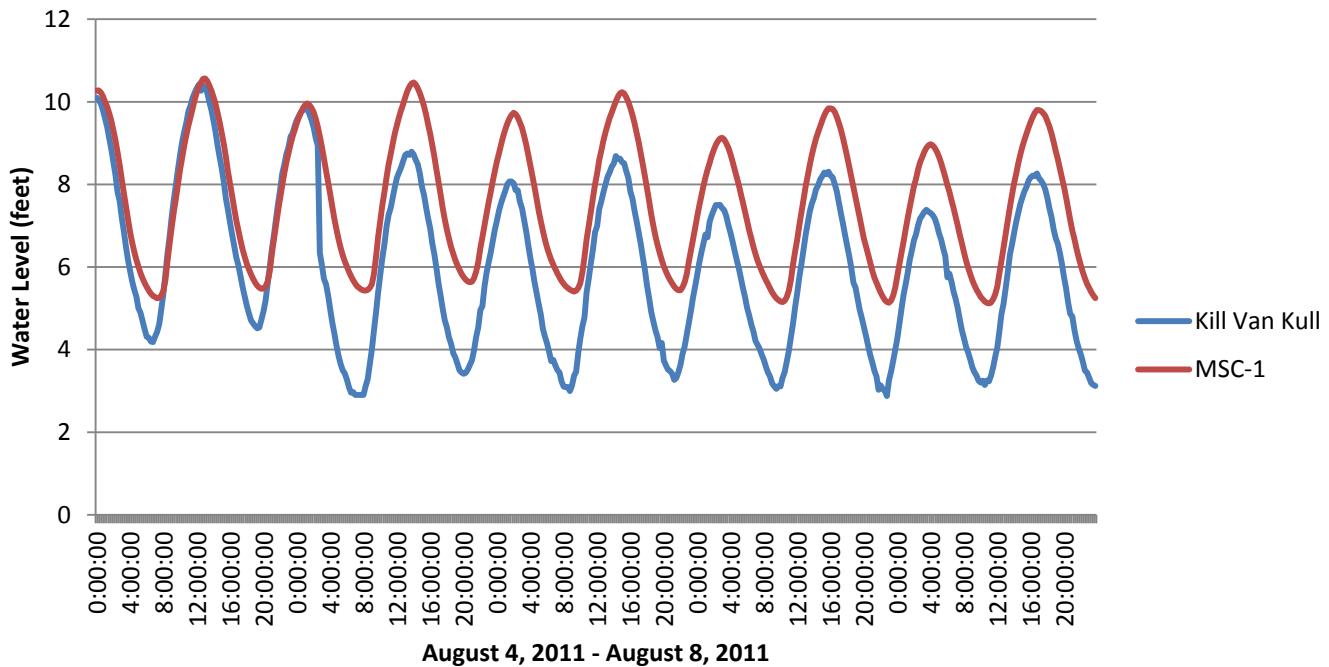
JWL-SOIL-11

4-8 feet



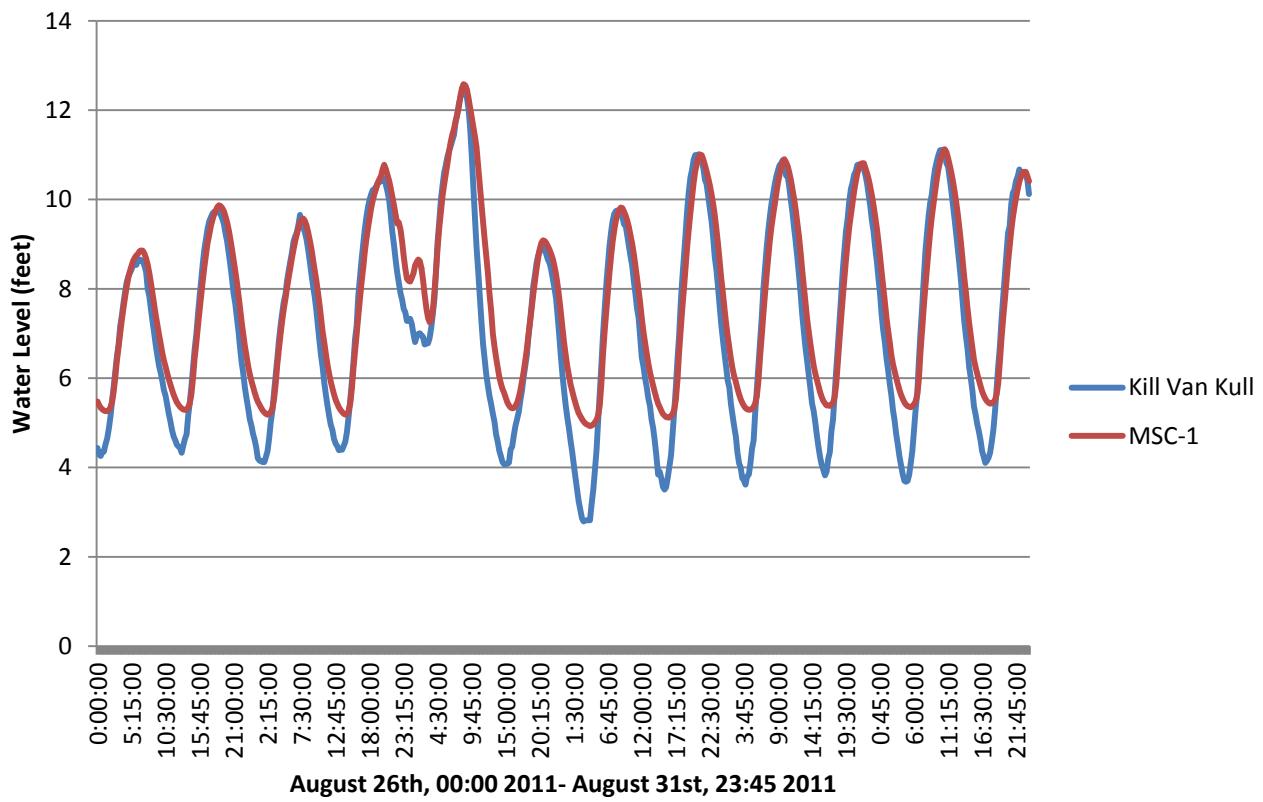
Appendix E
Transducer Data
Jewett White Lead Site 2011 Field Activities
Jewett White Lead Site
Staten Island, New York
December 15, 2011

Water Levels at the Jewett White Lead Site



The above table shows water levels in monitor well MSC-1 and in the Kill Van Kull recorded over a 5 day period between August 4th, 2011 and August 8th, 2011. Solinst Levelogger brand transducers were deployed into monitoring well MSC-1 and into a temporary well structure within the Kill Van Kull to monitor and record water levels at 1 minute intervals over a 44 day period. The figure above displays the tidal influence of MSC-1 which shows little to no discernable attenuation due to its close proximity to the Kill Van Kull. The graph also shows an overall peak in water levels beginning on August 4th and tapering off as the week progresses. This is due to a rainfall of approximately .75 inches over a 12 hour period on August 4th.

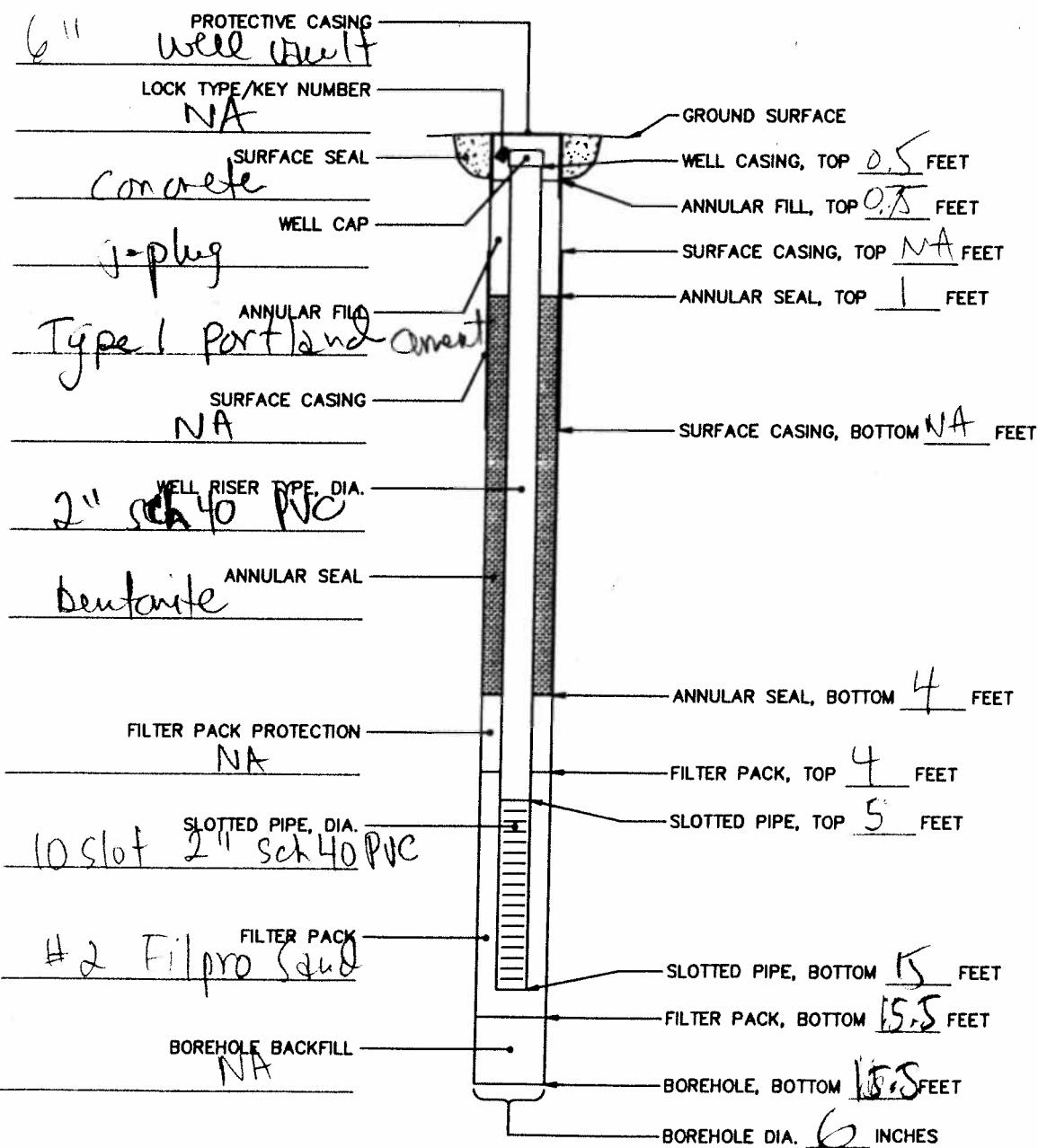
Water Levels During Hurricane Irene 2011 at the Jewett White Lead Site



This graph shows the influence of the rainfall of Hurricane Irene on the water levels in monitoring well MSC-1 and the nearby Kill Van Kull. As a result of the hurricane, 2.88 inches of rain fell on Staten Island on August 27 and 3.99 inches of rain fell on August 28, 2011.

Appendix F
Well Log for MSC-5
Jewett White Lead Site 2011 Field Activities
Jewett White Lead Site
Staten Island, New York
December 15, 2011

WELL CONSTRUCTION DIAGRAM		WELL DESIGNATION: MSC - 5	
CLIENT	FRT/EPA	CONTRACT NAME	SEPARAS
PROJECT NAME	Jewett White Field Site	CONTRACT NO.	—
PROJECT CITY, STATE	Staten Island	CONTRACTOR	Lockheed Martin
PROJECT NO.	WA 138	INSPECTOR	J. Bolduc
DRILLING ORGANIZATION	Jersey Barup	PERMIT NO.	NA
DRILLER NAME	Chuck Deigert	WELL LOCATION	NE corner of Moran Property
DRILLING TOG/METHOD	CMB 75	MEASUREMENT REFERENCE POINT	—
INSTALLATION START DATE	8/10/11	REFERENCE POINT ELEVATION	—
INSTALLATION/COMPLETION DATE	8/10/11		



	PROJECT NUMBER WA 138	BORING NUMBER MSC-5	SHEET 1 OF 2
SOIL BORING LOG			

PROJECT: Jewett White Land Site LOCATION: NE corner of Moran Properties
 ELEVATION: NA DRILLING CONTRACTOR: Jersey Boring
 DRILLING METHOD AND EQUIPMENT USED: HSA CME-75
 WATER LEVELS: NA START: 0835 8/10/11 END: 1440 8/10/11 LOGGER: J Bolduc

DEPTH BELOW SURFACE (FT)	STANDARD PENETRATION TEST RESULTS			SOIL DESCRIPTION SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY, OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY.	COMMENTS DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, AND INSTRUMENTATION. PID (ppm): Breathing Zone Above Hole
	INTERVAL (FT)		RECOVERY (IN) #TYPE		
	RECOVERY (IN) #TYPE	6"-6"-6" (N)			
8	NS	39-13-B-1		0-8" ASPHALT layered with SILTY SAND, dark grayish brown, fine grained, some silt, little fine gravel, moist, loose.	NA NA NA
8	NS	1-2-S-5		2'-2.7' SILTY SAND (FILL) dark yellowish brown, fine grained, trace calc angular gravel, some silt, brick fragments, abundant coal chips, damp, loose.	NA NA NA
5 - 10	NS	3-2-S-7		3-4.8' SILTY SAND (FILL) yellowish brown with black mottling, fine grained, little medium grained, brick fragments, sand and coal chips at the water table, dry to wet at 4.5 feet, loose, wood plug in sampler shoe.	NA NA NA
7	NS	4-4-3-3		4-4.8' SILTY SAND (FILL) yellowish brown with black mottling, fine grained, little medium grained, brick fragments, sand and coal chips at the water table, dry to wet at 4.5 feet, loose, wood plug in sampler shoe.	NA NA NA
10	NS	6-5-3-2		6'-6.6' SILTY SAND (FILL) very dark gray, fine grained, trace fine angular gravel, some silt, abundant brick fragments, medium dense, wood plug in sampler shoe.	NA NA NA
10	wt of hammer first 2	0-0-1-1		6'-6.6' SILTY SAND (FILL) very dark gray, fine grained, trace fine angular gravel, some silt, abundant brick fragments, medium dense, wood plug in sampler shoe.	NA NA NA
8	NS	wt of hammer for sec	0-0-0-0	6'-6.6' SILTY SAND (FILL) very dark gray, fine grained, trace fine angular gravel, some silt, abundant brick fragments, medium dense, wood plug in sampler shoe.	NA NA NA
15	NS	wt of hammer for sec	0-0-0-0	8'-9.1' CLAYEY AND SILTY SAND (FILL) very dark gray, some silt and clay becomes more clayey near the bottom of sample, trace fine angular gravel, wood and brick fragments, rotten egg odor,	NA NA NA
BOTT =	16'				

	PROJECT NUMBER WA 138	BORING NUMBER MSC-5	SHEET 2 OF 2
SOIL BORING LOG			

PROJECT: Jewett Lushite Land Site

ELEVATION: NA

DRILLING CONTRACTOR:

LOCATION: NE corner of Mardon Property

DRILLING METHOD AND EQUIPMENT USED: HSA CME-7B

Jersey Borey

WATER LEVELS: NA

START: 0835 8/10/11

END: 1440 8/10/11

LOGGER: J. Botchue

DEPTH BELOW SURFACE (FT)	STANDARD PENETRATION			SOIL DESCRIPTION	COMMENTS
	INTERVAL (FT)	RECOVERY (IN)	#/TYPE		
			6"-6"-6"-6" (N)		
10'-10.5'				CLAYEY AND SILTY SAND (FILL) very dark gray, fine to coarse grained, little fine gravel, some clay and silt, brick fragments and white to reddish brown slag-like material, wet, very loose	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, AND INSTRUMENTATION. PID (ppm): Breathing Zone Above Hole
10.5'-10.8'				CLAYEY SILT very dark gray, little fine sand, micaceous, nonplastic, rotten egg odor, very soft, wet	
12'-12.3'				SILTY SAND (FILL) very dark gray, coarse grained, some silt, predominantly brick and wood fragments with slag-like material, wet very loose, possibly slough in sampler.	
12.3'-12.8'				CLAYEY SILT very dark gray, trace fine sand, micaceous, low plasticity, no odor, wet	
14'-15'				SILTY CLAY (FILL) very dark gray, brick and wood fragments, slag-like material, rotten egg odor, wet, very soft, possibly slough in sampler.	
15'-16'				SILTY CLAY very dark gray, trace fine sand, micaceous, medium plasticity, some small shell fragments (up to 2mm), damp from 15 to 15.73 feet and wet from 15.75 to 16 feet, very soft.	

Appendix G
Region II Analytical Data
Jewett White Lead Site 2011 Field Activities
Jewett White Lead Site
Staten Island, New York
December 15, 2011

Case Narrative: Jewett White Lead #11070033

The National Environmental Laboratory Accreditation Conference (NELAC) is a voluntary environmental laboratory accreditation association of State and Federal agencies. NELAC established and promoted a national accreditation program that provides a uniform set of standards for the generation of environmental data that are of known and defensible quality. The EPA Region 2 Laboratory is NELAC accredited. The Laboratory tests that are accredited have met all the requirements established under the NELAC Standards.

Comment(s):

None

Data Qualifier(s):

- U- The analyte was not detected at or above the Reporting Limit.
- J- The identification of the analyte is acceptable; the reported value is an estimate.
- K- The identification of the analyte is acceptable; the reported value may be biased high.
- L- The identification of the analyte is acceptable; the reported value may be biased low.
- NJ-There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification. The reported value is an estimate.

Reporting Limit(s):

The Laboratory was able to achieve the Contract Required Quantitation Limits (CRQLs), where applicable, for each analyte requested.

Method(s):

All methods that are NELAC accredited in the Laboratory are noted with “NELAC” at the end of the method reference.

- TAL Metals Analysis, EPA SOP C-109 (ICP/AES Method)

Approval: _____ Date: _____

Sys_sample_code	sample date	lab anal method	analysis date	lab sample l	cas_rn	chemical na result value	reportable	n	detect_flag	lab qualifier	validator	qualifiers	reporting detection limi	result unit
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7440-22-4	Silver ---	Yes	N	U				0.44	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7429-90-5	Aluminum 7,200	Yes	Y					8.8	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7440-38-2	Arsenic 10	Yes	Y					0.70	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7439-39-3	Barium 100	Yes	Y					8.8	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7440-41-7	Beryllium 0.61	Yes	Y					0.26	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7440-70-2	Calcium 8,200	Yes	Y					44	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7440-43-9	Cadmium 0.30	Yes	Y					0.26	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7440-48-4	Cobalt 11	Yes	Y					1.8	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7440-47-3	Chromium 33	Yes	Y					0.44	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7440-50-8	Copper 130	Yes	Y					0.90	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7439-89-6	Iron 19,000	Yes	Y					4.4	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7440-09-7	Potassium 960	Yes	Y					44	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7439-95-4	Magnesium 8,600	Yes	Y					44	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7439-96-5	Manganese 290	Yes	Y					0.44	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7440-23-5	Sodium 240	Yes	Y					88	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7440-02-0	Nickel 100	Yes	Y					1.8	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7439-92-1	Lead 190	Yes	Y					0.70	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7440-36-0	Antimony ---	Yes	N	U				1.8	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7782-49-2	Selenium ---	Yes	N	U				1.8	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7440-28-0	Thallium ---	Yes	N	U				1.8	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7440-62-2	Vanadium 28	Yes	Y					1.8	mg/Kg
138-071811-0016	07/18/2011	C-109	10/04/2011	AN03417	7440-66-6	Zinc 450	Yes	Y					1.8	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7440-22-4	Silver 0.50	Yes	Y					0.46	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7429-90-5	Aluminum 3,200	Yes	Y					9.3	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7440-38-2	Arsenic 14	Yes	Y					0.74	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7439-39-3	Barium 110	Yes	Y					9.3	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7440-41-7	Beryllium 1.2	Yes	Y					0.28	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7440-70-2	Calcium 46,000	Yes	Y					46	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7440-43-9	Cadmium 1.2	Yes	Y					0.28	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7440-48-4	Cobalt 23	Yes	Y					1.9	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7440-47-3	Chromium 48	Yes	Y					0.46	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7440-50-8	Copper 860	Yes	Y					0.90	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7439-89-6	Iron 54,000	Yes	Y					46.0	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7440-09-7	Potassium 410	Yes	Y					46	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7439-95-4	Magnesium 28,000	Yes	Y					46	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7439-96-5	Manganese 370	Yes	Y					0.46	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7440-23-5	Sodium 590	Yes	Y					93	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7440-02-0	Nickel 150	Yes	Y					1.9	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7439-92-1	Lead 2,400	Yes	Y					0.74	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7440-36-0	Antimony 360	Yes	Y					1.9	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7782-49-2	Selenium ---	Yes	N	U				1.9	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7440-28-0	Thallium ---	Yes	N	U				1.9	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7440-62-2	Vanadium 26	Yes	Y					1.9	mg/Kg
138-071811-0021	07/18/2011	C-109	10/04/2011	AN03418	7440-66-6	Zinc 610	Yes	Y					0.45	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7440-22-4	Silver 0.50	Yes	Y					9.1	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7429-90-5	Aluminum 4,700	Yes	Y					0.73	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7440-38-2	Arsenic 56	Yes	Y					9.1	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7439-39-3	Barium 240	Yes	Y					0.27	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7440-41-7	Beryllium ---	Yes	N	U				45	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7440-70-2	Calcium 13,000	Yes	Y					0.27	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7440-43-9	Cadmium 2.0	Yes	Y					1.8	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7440-48-4	Cobalt 51	Yes	Y					0.45	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7440-47-3	Chromium 31	Yes	Y					0.45	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7440-50-8	Copper 2,900	Yes	Y					0.90	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7439-89-6	Iron 95,000	Yes	Y					45.0	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7440-09-7	Potassium 900	Yes	Y					45	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7439-95-4	Magnesium 3,600	Yes	Y					45	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7439-96-5	Manganese 810	Yes	Y					0.45	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7440-23-5	Sodium 3,600	Yes	Y					91	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7440-02-0	Nickel 73	Yes	Y					1.8	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7439-92-1	Lead 4,600	Yes	Y					0.73	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7440-36-0	Antimony 17	Yes	Y					1.8	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7782-49-2	Selenium ---	Yes	N	U				1.8	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7440-28-0	Thallium ---	Yes	N	U				1.8	mg/Kg
138-071811-0026	07/18/2011	C-109	10/04/2011	AN03419	7440-62-2	Vanadium 27	Yes	Y					1.8	mg/Kg
138-071811-0031	07/18/2011	C-109	10/04/2011	AN03420	7440-66-6	Zinc 800	Yes	Y					0.44	mg/Kg
138-071811-0031	07/18/2011	C-109	10/04/2011	AN03420	7440-22-4	Silver ---	Yes	N	U				1.8	mg/Kg
138-071811-0031	07/18/2011	C-109	10/04/2011	AN03420	7429-90-5	Aluminum 4,700	Yes	Y					0.44	mg/Kg
138-071811-0031	07/18/2011	C-109	10/04/2011	AN03420	7440-38-2	Arsenic 6.3	Yes	Y					0.70	mg/Kg
138-071811-0031	07/18/2011	C-109	10/04/2011	AN03420	7440-39-3	Barium 71	Yes	Y					8.8	mg/Kg
138-071811-0031	07/18/2011	C-109	10/04/2011	AN03420	7440-41-7	Beryllium 0.32	Yes	Y					0.26	mg/Kg
138-071811-0031	07/18/2011	C-109	10/04/2011	AN03420	7440-70-2	Calcium 5,400	Yes	Y					44	mg/Kg
138-071811-0031	07/18/2011	C-109	10/04/2011	AN03420	7440-43-9	Cadmium 0.33	Yes	Y					0.26	mg/Kg
138-071811-0031	07/18/2011	C-109	10/04/2011	AN03420	7440-48-4	Cobalt 4.6	Yes	Y					1.8	mg/Kg
138-071811-0031	07/18/2011	C-109	10/04/2011	AN03420	7440-47-3	Chromium 14	Yes	Y					0.44	mg/Kg
138-071811-0031	07/18/2011	C-109	10/04/2011	AN03420	7440-50-8	Copper 48	Yes	Y					0.90	mg/Kg
138-071811-0031	07/18/2011	C-109	10/04/2011	AN03420	7439-89-6	Iron 12,000	Yes	Y	</td					

138-071811-0036	07/18/2011 C-109	10/04/2011 AN03421	7440-28-0	Thallium	—	Yes	N	U	1.8	mg/Kg
138-071811-0036	07/18/2011 C-109	10/04/2011 AN03421	7440-62-2	Vanadium	26	Yes	Y		1.8	mg/Kg
138-071811-0036	07/18/2011 C-109	10/04/2011 AN03421	7440-66-6	Zinc	1,700	Yes	Y		1.8	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7440-22-4	Silver	0.70	Yes	Y		0.45	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03421	7429-90-5	Aluminum	1,700	Yes	Y		9.1	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7440-38-2	Arsenic	5.3	Yes	Y		0.73	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7440-39-3	Barium	150	Yes	Y		9.1	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7440-41-7	Beryllium	—	Yes	N	U	0.27	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7440-70-2	Calcium	16,000	Yes	Y		45	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7440-43-9	Cadmium	1.3	Yes	Y		0.27	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7440-48-4	Cobalt	9.2	Yes	Y		1.8	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7440-47-3	Chromium	9.0	Yes	Y		0.45	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7440-50-8	Copper	240	Yes	Y		0.90	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7439-89-6	Iron	25,000	Yes	Y		4.5	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7440-09-7	Potassium	250	Yes	Y		45	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7439-95-4	Magnesium	1,800	Yes	Y		45	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7439-96-5	Manganese	770	Yes	Y		0.45	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7440-23-5	Sodium	1,200	Yes	Y		91	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7440-02-0	Nickel	14	Yes	Y		1.8	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7439-92-1	Lead	28,000	Yes	Y		7.27	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7440-36-0	Antimony	3.8	Yes	Y		1.8	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7782-49-2	Selenium	—	Yes	N	U	1.8	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7440-28-0	Thallium	—	Yes	N	U	1.8	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7440-62-2	Vanadium	10	Yes	Y		1.8	mg/Kg
138-071811-0041	07/18/2011 C-109	10/04/2011 AN03422	7440-66-6	Zinc	270	Yes	Y		1.8	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7440-22-4	Silver	0.50	Yes	Y		0.45	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7429-90-5	Aluminum	2,500	Yes	Y		9.1	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7440-38-2	Arsenic	24	Yes	Y		0.73	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7440-39-3	Barium	300	Yes	Y		9.1	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7440-41-7	Beryllium	—	Yes	N	U	0.27	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7440-70-2	Calcium	2,400	Yes	Y		45	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7439-43-9	Cadmium	2.1	Yes	Y		0.27	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7440-48-4	Cobalt	12	Yes	Y		1.8	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7440-47-3	Chromium	27	Yes	Y		0.45	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7440-50-8	Copper	1,900	Yes	Y		0.90	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7439-89-6	Iron	89,000	Yes	Y		45.0	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7440-09-7	Potassium	160	Yes	Y		45	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7439-95-4	Magnesium	590	Yes	Y		45	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7439-96-5	Manganese	400	Yes	Y		0.45	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7440-23-5	Sodium	1,600	Yes	Y		91	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7440-02-0	Nickel	32	Yes	Y		1.8	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7439-92-1	Lead	7,500	Yes	Y		7.27	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7440-36-0	Antimony	390	Yes	Y		1.8	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7782-49-2	Selenium	—	Yes	N	U	1.8	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7440-28-0	Thallium	—	Yes	N	U	1.8	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7440-62-2	Vanadium	23	Yes	Y		1.8	mg/Kg
138-071811-0046	07/18/2011 C-109	10/04/2011 AN03423	7440-66-6	Zinc	780	Yes	Y		0.45	mg/Kg
138-071811-0051	07/18/2011 C-109	10/04/2011 AN03424	7440-22-4	Silver	—	Yes	N	U	0.45	mg/Kg
138-071811-0051	07/18/2011 C-109	10/04/2011 AN03424	7429-90-5	Aluminum	1,000	Yes	Y		9	mg/Kg
138-071811-0051	07/18/2011 C-109	10/04/2011 AN03424	7440-38-2	Arsenic	1.8	Yes	Y		0.73	mg/Kg
138-071811-0051	07/18/2011 C-109	10/04/2011 AN03424	7440-39-3	Barium	180	Yes	Y		9	mg/Kg
138-071811-0051	07/18/2011 C-109	10/04/2011 AN03424	7440-41-7	Beryllium	—	Yes	N	U	0.27	mg/Kg
138-071811-0051	07/18/2011 C-109	10/04/2011 AN03424	7440-70-2	Calcium	24,000	Yes	Y		45	mg/Kg
138-071811-0051	07/18/2011 C-109	10/04/2011 AN03424	7439-95-4	Magnesium	630	Yes	Y		45	mg/Kg
138-071811-0051	07/18/2011 C-109	10/04/2011 AN03424	7439-96-5	Manganese	530	Yes	Y		0.45	mg/Kg
138-071811-0051	07/18/2011 C-109	10/04/2011 AN03424	7440-23-5	Sodium	5,900	Yes	Y		91	mg/Kg
138-071811-0051	07/18/2011 C-109	10/04/2011 AN03424	7440-02-0	Nickel	4.1	Yes	Y		1.8	mg/Kg
138-071811-0051	07/18/2011 C-109	10/04/2011 AN03424	7439-92-1	Lead	36,000	Yes	Y		7.27	mg/Kg
138-071811-0051	07/18/2011 C-109	10/04/2011 AN03424	7440-36-0	Antimony	3.2	Yes	Y		1.8	mg/Kg
138-071811-0051	07/18/2011 C-109	10/04/2011 AN03424	7782-49-2	Selenium	—	Yes	N	U	1.8	mg/Kg
138-071811-0051	07/18/2011 C-109	10/04/2011 AN03424	7440-28-0	Thallium	—	Yes	N	U	1.8	mg/Kg
138-071811-0051	07/18/2011 C-109	10/04/2011 AN03424	7440-62-2	Vanadium	5.2	Yes	Y		1.8	mg/Kg
138-071811-0051	07/18/2011 C-109	10/04/2011 AN03424	7440-66-6	Zinc	210	Yes	Y		0.41	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7440-22-4	Silver	—	Yes	N	U	8	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7429-90-5	Aluminum	7,400	Yes	Y		0.66	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7440-38-2	Arsenic	17	Yes	Y		8	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7440-39-3	Barium	140	Yes	Y		0.25	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7440-41-7	Beryllium	0.37	Yes	Y		41	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7440-70-2	Calcium	19,000	Yes	Y		0.25	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7439-43-9	Cadmium	0.80	Yes	Y		1.6	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7440-48-4	Cobalt	14	Yes	Y		0.41	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7440-47-3	Chromium	38	Yes	Y		0.8	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7440-50-8	Copper	380	Yes	Y		41.0	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7439-89-6	Iron	80,000	Yes	Y		82	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7440-09-7	Potassium	680	Yes	Y		41	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7439-95-4	Magnesium	2,000	Yes	Y		0.41	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7439-96-5	Manganese	430	Yes	Y		82	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7440-23-5	Sodium	2,100	Yes	Y		1.6	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7440-02-0	Nickel	32	Yes	Y		1.6	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7439-92-1	Lead	6,200	Yes	Y		6.56	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7440-36-0	Antimony	27	Yes	Y		1.6	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7782-49-2	Selenium	—	Yes	N	U	1.6	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7440-28-0	Thallium	—	Yes	N	U	1.6	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7440-62-2	Vanadium	22	Yes	Y		1.6	mg/Kg
138-071811-0056	07/18/2011 C-109	10/04/2011 AN03425	7440-66-6	Zinc	310	Yes	Y		0.45	mg/Kg
138-071811-0061	07/18/2011 C-109	10/04/2011 AN03426	7440-22-4	Silver	—	Yes	N	U	9	mg/Kg
138-071811-0061	07/18/2011 C-109	10/04/2011 AN03426	7429-90-5	Aluminum	5,400	Yes	Y		0.73	mg/Kg
138-071811-0061	07/18/2011 C-109	10/04/2011 AN03426	7440-38-2	Arsenic	27	Yes	Y		9	mg/Kg

138-071811-0061	07/18/2011 C-109	10/04/2011 AN03426 7782-49-2 Selenium --	Yes	N	U	1.8	mg/Kg
138-071811-0061	07/18/2011 C-109	10/04/2011 AN03426 7440-28-0 Thallium --	Yes	N	U	1.8	mg/Kg
138-071811-0061	07/18/2011 C-109	10/04/2011 AN03426 7440-62-2 Vanadium 47	Yes	Y		1.8	mg/Kg
138-071811-0061	07/18/2011 C-109	10/04/2011 AN03426 7440-66-6 Zinc 1,900	Yes	Y		1.8	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7440-22-4 Silver --	Yes	N	U	0.45	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7429-90-5 Aluminum 4,800	Yes	Y		9	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7440-38-2 Arsenic 5.6	Yes	Y		0.73	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7440-39-3 Barium 140	Yes	Y		9	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7440-41-7 Beryllium --	Yes	N	U	0.27	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7440-70-2 Calcium 22,000	Yes	Y		45	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7440-43-9 Cadmium --	Yes	N	U	0.27	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7440-48-4 Cobalt 4.6	Yes	Y		1.8	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7440-47-3 Chromium 15	Yes	Y		0.45	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7440-50-8 Copper 67	Yes	Y		0.9	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7439-89-6 Iron 13,000	Yes	Y		4.5	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7440-09-7 Potassium 830	Yes	Y		91	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7439-95-4 Magnesium 2,700	Yes	Y		45	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7439-96-5 Manganese 380	Yes	Y		0.45	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7440-23-5 Sodium 210	Yes	Y		91	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7440-02-0 Nickel 19	Yes	Y		1.8	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7439-92-1 Lead 430	Yes	Y		0.73	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7440-36-0 Antimony --	Yes	N	U	1.8	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7782-49-2 Selenium --	Yes	N	U	1.8	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7440-28-0 Thallium --	Yes	N	U	1.8	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7440-62-2 Vanadium 20	Yes	Y		1.8	mg/Kg
138-071811-0066	07/18/2011 C-109	10/04/2011 AN03427 7440-66-6 Zinc 120	Yes	Y		1.8	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7440-22-4 Silver --	Yes	N	U	0.42	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7429-90-5 Aluminum 2,700	Yes	Y		8.3	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7440-38-2 Arsenic 33	Yes	Y		0.67	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7440-39-3 Barium 240	Yes	Y		8.3	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7440-41-7 Beryllium --	Yes	N	U	0.25	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7440-70-2 Calcium 2,900	Yes	Y		42	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7440-43-9 Cadmium 2.0	Yes	Y		0.25	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7440-48-4 Cobalt 14	Yes	Y		1.7	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7440-47-3 Chromium 32	Yes	Y		0.42	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7440-50-8 Copper 1,900	Yes	Y		0.8	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7439-89-6 Iron 150,000	Yes	Y		42.0	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7440-09-7 Potassium 240	Yes	Y		83	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7439-95-4 Magnesium 850	Yes	Y		42	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7439-96-5 Manganese 400	Yes	Y		0.42	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7440-23-5 Sodium 630	Yes	Y		83	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7440-02-0 Nickel 45	Yes	Y		1.7	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7439-92-1 Lead 3,200	Yes	Y		0.67	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7440-36-0 Antimony 21	Yes	Y		1.7	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7782-49-2 Selenium --	Yes	N	U	1.7	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7440-28-0 Thallium --	Yes	N	U	1.7	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7440-62-2 Vanadium 35	Yes	Y		1.7	mg/Kg
138-071811-0071	07/18/2011 C-109	10/04/2011 AN03428 7440-66-6 Zinc 950	Yes	Y	J	1.7	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7440-22-4 Silver --	Yes	N	U	0.41	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7429-90-5 Aluminum 6,600	Yes	Y		8.2	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7440-38-2 Arsenic 3.6	Yes	Y		0.66	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7440-39-3 Barium 71	Yes	Y		8.2	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7440-41-7 Beryllium --	Yes	N	U	0.25	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7440-70-2 Calcium 51,000	Yes	Y		41	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7440-43-9 Cadmium 0.25	Yes	N		0.25	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7440-48-4 Cobalt 5.6	Yes	Y		1.6	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7440-47-3 Chromium 26	Yes	Y		0.41	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7440-50-8 Copper 69	Yes	Y		0.8	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7439-89-6 Iron 19,000	Yes	Y		4.1	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7440-09-7 Potassium 1,600	Yes	Y		82	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7439-95-4 Magnesium 8,400	Yes	Y		41	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7439-96-5 Manganese 230	Yes	Y		0.41	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7440-23-5 Sodium 1,100	Yes	Y		82	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7440-02-0 Nickel 24	Yes	Y		1.6	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7439-92-1 Lead 1,100	Yes	Y		0.66	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7440-36-0 Antimony --	Yes	N	U	1.6	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7782-49-2 Selenium --	Yes	N	U	1.6	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7440-28-0 Thallium --	Yes	N	U	1.6	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7440-62-2 Vanadium 20	Yes	Y		1.6	mg/Kg
138-071811-0076	07/18/2011 C-109	10/04/2011 AN03429 7440-66-6 Zinc 140	Yes	Y		1.6	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7440-22-4 Silver --	Yes	N	U	0.47	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7429-90-5 Aluminum 9,500	Yes	Y		9.4	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7440-38-2 Arsenic 19	Yes	Y		0.75	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7440-39-3 Barium 220	Yes	Y		9.4	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7440-41-7 Beryllium 0.49	Yes	Y		0.28	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7440-70-2 Calcium 30,000	Yes	Y		47	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7440-43-9 Cadmium 1.6	Yes	Y		0.28	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7440-48-4 Cobalt 9.5	Yes	Y		1.9	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7440-47-3 Chromium 120	Yes	Y		0.47	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7440-50-8 Copper 1,600	Yes	Y		0.90	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7439-89-6 Iron 49,000	Yes	Y		47.0	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7440-09-7 Potassium 1,300	Yes	Y		94	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7439-95-4 Magnesium 11,000	Yes	Y		47	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7439-96-5 Manganese 350	Yes	Y		0.47	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7440-23-5 Sodium 1,100	Yes	Y		94	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7440-02-0 Nickel 79	Yes	Y		1.9	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7439-92-1 Lead 4,500	Yes	Y		0.75	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7440-36-0 Antimony 20	Yes	Y		1.9	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7782-49-2 Selenium --	Yes	N	U	1.9	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7440-28-0 Thallium --	Yes	N	U	1.9	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7440-62-2 Vanadium 27	Yes	Y		1.9	mg/Kg
138-071811-0080	07/18/2011 C-109	10/04/2011 AN03430 7440-66-6 Zinc 590	Yes	Y		1.9	mg/Kg
138-071811-0086	07/18/2011 C-109	10/04/2011 AN03431 7440-22-4 Silver 1.2	Yes	Y		0.44	mg/Kg
138-071811-0086	07/18/2011 C-109	10/04/2011 AN03431 7429-90-5 Aluminum 2,700	Yes	Y		8.8	mg/Kg
138-071811-0086	07/18/2011 C-109	10/04/2011 AN03431 7440-38-2 Arsenic 15	Yes	Y		0.70	mg/Kg
138-071811-0086	07/18/2011 C-109	10/04/2011 AN03431 7440-39-3 Barium 94	Yes	Y		8.8	mg/Kg
138-071811-0086	07/18/2011 C-109	10/04/2011 AN03431 7440-41-7 Beryllium ...	Yes	N	U	0.26	mg/Kg
138-071811-0086	07/18/2011 C-109	10/04/2011 AN03431 7440-70-2 Calcium 7,300	Yes	Y		44	mg/Kg
138-071811-0086	07/18/2011 C-109	10/04/2011 AN03431 7440-43-					

138-071811-0086	07/18/2011 C-109	10/04/2011 AN03431	7440-36-0	Antimony	15	Yes	Y		1.8	mg/Kg
138-071811-0086	07/18/2011 C-109	10/04/2011 AN03431	7782-49-2	Selenium	---	Yes	N	U	1.8	mg/Kg
138-071811-0086	07/18/2011 C-109	10/04/2011 AN03431	7440-28-0	Thallium	---	Yes	N	U	1.8	mg/Kg
138-071811-0086	07/18/2011 C-109	10/04/2011 AN03431	7440-62-2	Vanadium	26	Yes	Y		1.8	mg/Kg
138-071811-0086	07/18/2011 C-109	10/04/2011 AN03431	7440-66-6	Zinc	4,600	Yes	Y		1.8	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7440-22-4	Silver	---	Yes	N	U	0.47	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7429-90-5	Aluminum	7,400	Yes	Y		9	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7440-38-2	Arsenic	6.0	Yes	Y		0.75	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7440-39-3	Barium	100	Yes	Y		9	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7440-41-7	Beryllium	---	Yes	N	U	0.28	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7440-70-2	Calcium	37,000	Yes	Y		47	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7440-43-9	Cadmium	---	Yes	N	U	0.28	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7440-48-4	Cobalt	8.4	Yes	Y		1.9	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7440-47-3	Chromium	33	Yes	Y		0.47	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7440-50-8	Copper	480	Yes	Y		0.9	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7439-89-6	Iron	30,000	Yes	Y		4.7	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7440-09-7	Potassium	3,700	Yes	Y		94	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7439-95-4	Magnesium	17,000	Yes	Y		47	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7439-96-5	Manganese	310	Yes	Y		0.47	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7440-23-5	Sodium	600	Yes	Y		94	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7440-02-0	Nickel	31	Yes	Y		1.9	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7439-92-1	Lead	310	Yes	Y		0.75	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7440-36-0	Antimony	2.5	Yes	Y		1.9	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7782-49-2	Selenium	---	Yes	N	U	1.9	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7440-28-0	Thallium	---	Yes	N	U	1.9	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7440-62-2	Vanadium	29	Yes	Y		1.9	mg/Kg
138-071811-0090	07/18/2011 C-109	10/04/2011 AN03432	7440-66-6	Zinc	380	Yes	Y		1.9	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7440-22-4	Silver	---	Yes	N	U	0.45	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7429-90-5	Aluminum	3,600	Yes	Y		9	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7440-38-2	Arsenic	13	Yes	Y		0.71	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7440-39-3	Barium	210	Yes	Y		9	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7440-41-7	Beryllium	---	Yes	N	U	0.27	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7440-70-2	Calcium	9,000	Yes	Y		45	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7440-43-9	Cadmium	1.8	Yes	Y		0.27	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7440-48-4	Cobalt	4.7	Yes	Y		1.8	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7440-47-3	Chromium	12	Yes	Y		0.45	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7440-50-8	Copper	470	Yes	Y		0.9	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7439-89-6	Iron	25,000	Yes	Y		4.5	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7440-09-7	Potassium	620	Yes	Y		89	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7439-95-4	Magnesium	3,200	Yes	Y		45	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7439-96-5	Manganese	160	Yes	Y		0.45	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7440-23-5	Sodium	480	Yes	Y		89	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7440-02-0	Nickel	16	Yes	Y		1.8	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7439-92-1	Lead	990	Yes	Y		0.71	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7440-36-0	Antimony	6.3	Yes	Y		1.8	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7782-49-2	Selenium	2.5	Yes	Y		1.8	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7440-28-0	Thallium	---	Yes	N	U	1.8	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7440-62-2	Vanadium	18	Yes	Y		42	mg/Kg
138-071811-0096	07/18/2011 C-109	10/04/2011 AN03433	7440-66-6	Zinc	470	Yes	Y		0.25	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7440-22-4	Silver	---	Yes	N	U	0.42	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7429-90-5	Aluminum	6,400	Yes	Y		8	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7440-38-2	Arsenic	6.3	Yes	Y		0.67	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7440-39-3	Barium	68	Yes	Y		8	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7440-41-7	Beryllium	0.34	Yes	Y		0.25	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7440-70-2	Calcium	1,900	Yes	Y		42	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7440-43-9	Cadmium	---	Yes	N	U	0.25	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7440-48-4	Cobalt	25	Yes	Y		1.7	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7440-47-3	Chromium	47	Yes	Y		0.42	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7440-50-8	Copper	39	Yes	Y		0.8	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7439-89-6	Iron	22,000	Yes	Y		4.2	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7440-09-7	Potassium	850	Yes	Y		83	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7439-95-4	Magnesium	17,000	Yes	Y		42	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7439-96-5	Manganese	400	Yes	Y		0.42	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7440-23-5	Sodium	460	Yes	Y		83	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7440-02-0	Nickel	350	Yes	Y		1.7	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7439-92-1	Lead	140	Yes	Y		0.67	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7440-36-0	Antimony	---	Yes	N	U	1.7	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7782-49-2	Selenium	---	Yes	N	U	1.7	mg/Kg
138-071811-0100	07/18/2011 C-109	10/04/2011 AN03434	7440-28-0	Thallium	---	Yes	N	U	1.7	mg/Kg
138-071811-0101	07/19/2011 C-109	08/12/2011 AN03435	7440-22-4	Silver	---	Yes	N	U	5	ug/L
138-071811-0101	07/19/2011 C-109	08/12/2011 AN03435	7429-90-5	Aluminum	---	Yes	N	U	100	ug/L
138-071811-0101	07/19/2011 C-109	08/12/2011 AN03435	7440-41-7	Beryllium	---	Yes	N	U	3	ug/L
138-071811-0101	07/19/2011 C-109	08/12/2011 AN03435	7440-70-2	Calcium	---	Yes	N	U	500	ug/L
138-071811-0101	07/19/2011 C-109	08/12/2011 AN03435	7440-43-9	Cadmium	---	Yes	N	U	3	ug/L
138-071811-0101	07/19/2011 C-109	08/12/2011 AN03435	7440-48-4	Cobalt	---	Yes	N	U	20	ug/L
138-071811-0101	07/19/2011 C-109	08/12/2011 AN03435	7440-47-3	Chromium	---	Yes	N	U	5	ug/L
138-071811-0101	07/19/2011 C-109	08/12/2011 AN03435	7440-50-8	Copper	---	Yes	N	U	10	ug/L
138-071811-0101	07/19/2011 C-109	08/12/2011 AN03435	7439-89-6	Iron	---	Yes	N	U	50	ug/L
138-071811-0101	07/19/2011 C-109	08/12/2011 AN03435	7440-09-7	Potassium	140,000	Yes	Y		500	ug/L
138-071811-0101	07/19/2011 C-109	08/12/2011 AN03435	7439-95-4	Magnesium	380,000	Yes	Y		500	ug/L
138-081011-0036	09/13/2011 C-109	10/05/2011 AN03642	7429-90-5	Aluminum	---	Yes	N	U	100	ug/L
138-081011-0036	09/13/2011 C-109	10/05/2011 AN03642	7440-38-2	Arsenic	---	Yes	N	U	8	ug/L
138-081011-0036	09/13/2011 C-109	10/05/2011 AN03642	7440-39-3	Barium	120	Yes	Y		100	ug/L
138-081011-0036	09/13/2011 C-109	10/05/2011 AN03642	7440-41-7	Beryllium	---	Yes	N	U	3	ug/L
138-081011-0036	09/13/2011 C-109	10/05/2011 AN03642	7440-70-2	Calcium	170,000	Yes	Y		500	ug/L
138-081011-0036	09/13/2011 C-109	10/05/2011 AN03642	7440-66-6	Zinc	---	Yes	N	U	5	ug/L
138-081011-0036	09/13/2011 C-109	10/05/2011 AN03642	7440-22-4	Silver	---	Yes	N	U	20	ug/L
138-081011-0036	09/13/2011 C-109	10/05/2011 AN03642	7440-49-9	Chromium	---	Yes	N	U	5	ug/L
138-081011-0036	09/13/2011 C-109	10/05/2011 AN03642	7440-50-8	Copper	---	Yes	N	U</		

138-081011-0036	09/13/2011 C-109	10/05/2011 AN03642	7439-92-1	Lead	—	Yes	N	U	8	
138-081011-0036	09/13/2011 C-109	10/05/2011 AN03642	7440-36-0	Antimony	—	Yes	N	U	20	
138-081011-0036	09/13/2011 C-109	10/05/2011 AN03642	7782-49-2	Selenium	—	Yes	N	U	20	
138-081011-0036	09/13/2011 C-109	10/05/2011 AN03642	7440-28-0	Thallium	—	Yes	N	U	20	
138-081011-0036	09/13/2011 C-109	10/05/2011 AN03642	7440-62-2	Vanadium	—	Yes	N	U	20	
138-081011-0036	09/13/2011 C-109	10/05/2011 AN03642	7440-66-6	Zinc	—	Yes	N	U	20	
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7440-22-4	Silver, DIS ⁵	—	Yes	N	U	5	
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7429-90-5	Aluminum	—	Yes	N	U	100	
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7440-38-2	Arsenic, DE	—	Yes	N	U	8	
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7440-39-3	Barium, DI ¹	—	Yes	N	U	100	
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7440-41-7	Beryllium, I	—	Yes	N	U	3	
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7440-70-2	Calcium, DI 120,000	—	Yes	Y	500		
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7440-43-9	Cadmium, I	—	Yes	N	U	3	
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7440-48-4	Cobalt, DIS	—	Yes	N	U	20	
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7440-47-3	Chromium	—	Yes	N	U	5	
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7440-50-8	Copper, DI ⁵	—	Yes	N	U	10	
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7439-89-6	Iron, DISSC 320	—	Yes	Y	50		
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7440-09-7	Potassium, I 100,000	—	Yes	Y	500		
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7439-95-4	Magnesium 300,000	—	Yes	Y	500		
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7439-96-5	Manganese, 84	—	Yes	Y	5		
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7440-23-5	Sodium, DI 2,300,000	—	Yes	Y	1000		
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7440-02-0	Nickel, DIS	—	Yes	N	U	20	
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7439-92-1	Lead, DISS 17	—	Yes	Y	8		
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7440-36-0	Antimony, I	—	Yes	N	U	20	
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7782-49-2	Selenium, E	—	Yes	N	U	20	
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7440-28-0	Thallium, D	—	Yes	N	U	20	
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7440-62-2	Vanadium, I	—	Yes	N	U	20	
138-081011-0037	09/13/2011 C-109	10/05/2011 AN03643	7440-66-6	Zinc, DISSC	—	Yes	N	U	20	
138-081011-0038	09/13/2011 C-109	10/05/2011 AN03644	7429-22-4	Silver	—	Yes	N	U	5	
138-081011-0038	09/13/2011 C-109	10/05/2011 AN03644	7429-90-5	Aluminum	—	Yes	N	U	100	
138-081011-0038	09/13/2011 C-109	10/05/2011 AN03644	7440-38-2	Arsenic	—	Yes	N	U	8	
138-081011-0038	09/13/2011 C-109	10/05/2011 AN03644	7440-39-3	Barium	—	Yes	N	U	100	
138-081011-0038	09/13/2011 C-109	10/05/2011 AN03644	7440-41-7	Beryllium	—	Yes	N	U	3	
138-081011-0038	09/13/2011 C-109	10/05/2011 AN03644	7440-70-2	Calcium 120,000	—	Yes	Y	500		
138-081011-0038	09/13/2011 C-109	10/05/2011 AN03644	7440-43-9	Cadmium	—	Yes	N	U	3	
138-081011-0038	09/13/2011 C-109	10/05/2011 AN03644	7440-48-4	Cobalt	—	Yes	N	U	20	
138-081011-0038	09/13/2011 C-109	10/05/2011 AN03644	7440-47-3	Chromium	—	Yes	N	U	5	
138-081011-0038	09/13/2011 C-109	10/05/2011 AN03644	7440-50-8	Copper	—	Yes	N	U	10	
138-081011-0038	09/13/2011 C-109	10/05/2011 AN03644	7440-38-2	Arsenic, DI	—	Yes	N	U	8	
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7440-39-3	Barium, DI 110	—	Yes	Y	100		
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7440-41-7	Beryllium, I	—	Yes	N	U	3	
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7440-70-2	Calcium, DI 2,200,000	—	Yes	Y	5		
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7440-02-0	Nickel	—	Yes	N	U	20	
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7439-92-1	Lead	140	Yes	Y	8		
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7440-36-0	Antimony	—	Yes	N	U	20	
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7782-49-2	Selenium	—	Yes	N	U	20	
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7440-28-0	Thallium	—	Yes	N	U	20	
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7440-62-2	Vanadium	—	Yes	N	U	20	
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7440-66-6	Zinc	28	Yes	Y	20		
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7440-22-4	Silver, DISS	—	Yes	N	U	5	
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7429-90-5	Aluminum	—	Yes	N	U	100	
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7439-95-4	Magnesium 290,000	—	Yes	Y	500		
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7439-96-5	Manganese 89	—	Yes	Y	5		
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7440-23-5	Sodium	2,200,000	—	Yes	Y	1000	
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7440-42-0	Nickel, DIS	—	Yes	N	U	20	
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7439-92-1	Lead, DISS	17	Yes	Y	8		
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7440-36-0	Antimony, I	—	Yes	N	U	20	
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7782-49-2	Selenium, E	—	Yes	N	U	20	
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7440-28-0	Thallium, D	—	Yes	N	U	20	
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7440-62-2	Vanadium, I	—	Yes	N	U	20	
138-081011-0039	09/13/2011 C-109	10/05/2011 AN03645	7440-66-6	Zinc, DISSC	—	Yes	N	U	20	
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7440-22-4	Silver	—	Yes	N	U	5	
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7440-39-3	Barium	100	Yes	Y	100		
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7440-41-7	Beryllium	—	Yes	N	U	3	
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7440-70-2	Calcium, DI 160,000	—	Yes	Y	500		
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7440-43-9	Cadmium	I	—	Yes	N	U	3
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7440-48-4	Cobalt, DIS	—	Yes	N	U	20	
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7440-47-3	Chromium	—	Yes	N	U	5	
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7440-50-8	Copper, DI ⁵	—	Yes	N	U	10	
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7440-38-2	Arsenic	—	Yes	N	U	8	
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7440-39-3	Barium, DI 110	—	Yes	Y	500		
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7440-02-0	Nickel	—	Yes	N	U	20	
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7439-92-1	Lead	40	Yes	Y	8		
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7440-36-0	Antimony	—	Yes	N	U	20	
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7782-49-2	Selenium	—	Yes	N	U	20	
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7440-28-0	Thallium	—	Yes	N	U	20	
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7440-62-2	Vanadium	—	Yes	N	U	20	
138-081011-0040	09/13/2011 C-109	10/05/2011 AN03646	7440-66-6	Zinc	—	Yes	N	U	20	
138-081011-0041	09/13/2011 C-109	10/05/2011 AN03647	7440-22-4	Silver, DISS	—	Yes	N	U	5	
138-081011-0041	09/13/2011 C-109	10/05/2011 AN03647	7429-90-5	Aluminum	—	Yes	N	U	100	
138-081011-0041	09/13/2011 C-109	10/05/2011 AN03647	7440-38-2	Arsenic, DI	—	Yes	N	U	8	
138-081011-0041	09/13/2011 C-109	10/05/2011 AN03647	7439-39-3	Barium, DI ⁵	—	Yes	N	U	100	
138-081011-0041	09/13/2011 C-109	10/05/2011 AN03647	7440-41-7	Beryllium, I	—	Yes	N	U	3	
138-081011-0041	09/13/2011 C-109	10/05/2011 AN03647	7440-70-2	Calcium, DI 130,000	—	Yes	Y	500		
138-081011-0041	09/13/2011 C-109	10/05/2011 AN03647	7440-43-9	Cadmium	I	—	Yes	N	U	3
138-081011-0041	09/13/2011 C-109	10/05/2011 AN03647	7440-48-4	Cobalt, DIS	—	Yes	N	U	20	
138-081011-0041	09/13/2011 C-109	10/05/2011 AN03647	7440-47-3	Chromium	—	Yes	N	U	5	
138-081011-0041	09/13/2011 C-109	10/05/2011 AN03647	7440-50-8	Copper, DI ⁵	—	Yes	N	U	10	
138-081011-0041	09/13/2011 C-109	10/05/2011 AN03647	7439-89-6	Iron, DISSC 520	—	Yes	Y	50		
138-081011-0041	09/13/2011 C-109	10/05/2011 AN03647	7440-09-7	Potassium, I 130,000	—	Yes	Y	500		
138-081011-0041	09/13/2011 C-109	10/05/2011 AN03647	7439-95-4	Magnesium 350,000	—	Yes	Y	500		
138-081011-0041	09/13/2011 C-109	10/05/2011 AN03647	7439-96-5	Manganese, 420	—	Yes	Y	5		
138-081011-0041	09/13/2011 C-109	10/05/2011 AN03647	7440-23-5	Sodium, DI 2,900,000	—	Yes	Y	1000		

138-081011-0046	09/13/2011 C-109	10/05/2011 AN03652	7440-23-5 Sodium	3,100,000	Yes	Y		1000	ug/L
138-081011-0046	09/13/2011 C-109	10/05/2011 AN03652	7440-02-0 Nickel	---	Yes	N	U	20	ug/L
138-081011-0046	09/13/2011 C-109	10/05/2011 AN03652	7439-92-1 Lead	120	Yes	Y		8	ug/L
138-081011-0046	09/13/2011 C-109	10/05/2011 AN03652	7440-36-2 Antimony	---	Yes	N	U	20	ug/L
138-081011-0046	09/13/2011 C-109	10/05/2011 AN03652	7782-49-2 Selenium	---	Yes	N	U	20	ug/L
138-081011-0046	09/13/2011 C-109	10/05/2011 AN03652	7440-28-0 Thallium	---	Yes	N	U	20	ug/L
138-081011-0046	09/13/2011 C-109	10/05/2011 AN03652	7440-62-2 Vanadium	---	Yes	N	U	20	ug/L
138-081011-0046	09/13/2011 C-109	10/05/2011 AN03652	7440-66-2 Zinc	---	Yes	N	U	20	ug/L
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7440-22-4 Silver	---	Yes	N	U	0.46	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7429-90-5 Aluminum	6,000	Yes	Y		9.3	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7440-38-2 Arsenic	5.6	Yes	Y		0.74	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7440-39-3 Barium	64	Yes	Y		9.3	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7440-41-7 Beryllium	0.35	Yes	Y		0.28	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7440-70-2 Calcium	2,000	Yes	Y		46	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7440-43-9 Cadmium	---	Yes	N	U	0.28	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7440-48-4 Cobalt	21	Yes	Y		1.9	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7440-47-3 Chromium	35	Yes	Y		0.46	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7440-50-8 Copper	37	Yes	Y		0.90	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7439-89-6 Iron	19,000	Yes	Y		4.6	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7440-09-7 Potassium	870	Yes	Y		46	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7439-95-4 Magnesium	12,000	Yes	Y		46	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7439-96-5 Manganese	450	Yes	Y		0.46	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7440-23-5 Sodium	410	Yes	Y		93	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7440-02-0 Nickel	260	Yes	Y		1.9	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7439-92-1 Lead	130	Yes	Y		0.74	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7440-36-0 Antimony	---	Yes	N	U	1.9	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7782-49-2 Selenium	---	Yes	N	U	1.9	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7440-28-0 Thallium	---	Yes	N	U	1.9	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7440-62-2 Vanadium	22	Yes	Y	J	1.9	mg/Kg
138-071811-0005	07/18/2011 C-109	10/04/2011 AN03414	7440-66-6 Zinc	110	Yes	Y	J	1.9	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7440-22-4 Silver	---	Yes	N	U	0.46	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7429-90-5 Aluminum	5,800	Yes	Y		9.3	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7440-38-2 Arsenic	7.5	Yes	Y		0.74	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7440-39-3 Barium	67	Yes	Y		9.3	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7440-41-7 Beryllium	0.34	Yes	Y		0.28	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7440-70-2 Calcium	1,200	Yes	Y		46	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7440-43-9 Cadmium	0.30	Yes	Y		0.28	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7440-48-4 Cobalt	34	Yes	Y		1.9	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7440-47-3 Chromium	62	Yes	Y		0.46	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7440-50-8 Copper	50	Yes	Y		0.90	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7439-89-6 Iron	25,000	Yes	Y		4.6	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7440-09-7 Potassium	880	Yes	Y		46	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7439-95-4 Magnesium	20,000	Yes	Y		46	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7439-96-5 Manganese	200	Yes	Y		0.46	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7440-23-5 Sodium	860	Yes	Y		93	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7440-02-0 Nickel	490	Yes	Y		1.9	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7439-92-1 Lead	170	Yes	Y		0.74	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7440-36-0 Antimony	---	Yes	N	U	1.9	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7782-49-2 Selenium	---	Yes	N	U	1.9	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7440-28-0 Thallium	---	Yes	N	U	1.9	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7440-62-2 Vanadium	24	Yes	Y		1.9	mg/Kg
138-071811-0010	07/18/2011 C-109	10/04/2011 AN03415	7440-66-6 Zinc	150	Yes	Y		1.9	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7440-22-4 Silver	---	Yes	N	U	0.41	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7429-90-5 Aluminum	6,500	Yes	Y		8.2	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7440-38-2 Arsenic	34	Yes	Y		0.66	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7440-39-3 Barium	110	Yes	Y		8.2	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7440-41-7 Beryllium	0.86	Yes	Y		0.25	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7440-70-2 Calcium	12,000	Yes	Y		41	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7440-43-9 Cadmium	0.62	Yes	Y		0.25	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7440-48-4 Cobalt	22	Yes	Y		1.6	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7440-47-3 Chromium	66	Yes	Y		0.41	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7440-50-8 Copper	310	Yes	Y		0.80	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7439-89-6 Iron	51,000	Yes	Y		41.0	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7440-09-7 Potassium	1,500	Yes	Y		41	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7439-95-4 Magnesium	12,000	Yes	Y		41	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7439-96-5 Manganese	430	Yes	Y		0.41	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7440-23-5 Sodium	1,100	Yes	Y		82	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7440-02-0 Nickel	150	Yes	Y		1.6	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7439-92-1 Lead	280	Yes	Y		0.66	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7440-36-0 Antimony	4.8	Yes	Y		1.6	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7782-49-2 Selenium	---	Yes	N	U	1.6	mg/Kg
138-071811-0011	07/18/2011 C-109	10/04/2011 AN03416	7440-28-0 Thallium	---	Yes	N	U	1.6	mg/Kg
138-081011-0003	08/10/2011 C-109	08/25/2011 AN03595	7440-23-5 Sodium	6,400,000	Yes	Y		1000	ug/L
138-081011-0003	08/10/2011 C-109	08/25/2011 AN03595	7440-02-0 Nickel	---	Yes	N	U	20	ug/L
138-081011-0003	08/10/2011 C-109	08/25/2011 AN03595	7439-92-1 Lead	---	Yes	N	U	16	ug/L
138-081011-0003	08/10/2011 C-109	08/25/2011 AN03595	7440-41-7 Beryllium	---	Yes	N	U	20	ug/L
138-081011-0003	08/10/2011 C-109	08/25/2011 AN03595	7782-49-2 Selenium	---	Yes	N	U	40	ug/L
138-081011-0003	08/10/2011 C-109	08/25/2011 AN03595	7440-28-0 Thallium	---	Yes	N	U	20	ug/L
138-080211-0042	08/02/2011 C-109	08/25/2011 AN03581	7440-22-4 Silver	---	Yes	N	U	5	ug/L
138-080211-0042	08/02/2011 C-109	08/25/2011 AN03581	7429-90-5 Aluminum	---	Yes	N	U	100	ug/L
138-080211-0042	08/02/2011 C-109	08/25/2011 AN03581	7440-38-2 Arsenic	---	Yes	N	U	5	ug/L
138-080211-0042	08/02/2011 C-109	08/25/2011 AN03581	7440-39-3 Barium	---	Yes	N	U	100	ug/L
138-080211-0042	08/02/2011 C-109	08/25/2011 AN03581	7439-89-6 Iron	---	Yes	N	U	3	ug/L
138-080211-0042	08/02/2011 C-109	08/25/2011 AN03581	7440-09-7 Potassium	---	Yes	N	U	500	ug/L
138-080211-0042	08/02/2011 C-109	08/25/2011 AN03581	7439-95-4 Magnesium	---	Yes	N	U	500	ug/L
138-080211-0042	08/02/2011 C-109	08/25/2011 AN03581	7439-96-5 Manganese	---	Yes	N	U	5	ug/L
138-080211-0042	08/02/2011 C-109	08/25/2011 AN03581	7440-23-5 Sodium	---	Yes	N	U	1000	ug/L
138-080211-0042	08/02/2011 C-109	08/25/2011 AN03581	7440-02-0 Nickel	---	Yes	N	U	20	ug/L
138-080211-0042	08/02/2011 C-109	08/25/2011 AN03581	7439-92-1 Lead	---	Yes	N	U	8	ug/L
138-080211-0042	08/02/2011 C-109	08/25/2011 AN03581	7440-36-0 Antimony	---	Yes	N	U	20	ug/L
138-080211-0042	08/02/2011 C-109	08/25/2011 AN03581	7782-49-2 Selenium	---	Yes	N	U	20	ug/L
138-080211-0042	08/02/2011 C-109	08/25/2011 AN03582	7440-22-4 Silver	---	Yes	N	U	0.47	mg/Kg
138-080211-0042	08/02/2011 C-109	08/25/2011 AN03582	7429-						

138-080211-0005	08/02/2011 C-109	10/04/2011 AN03572	7440-48-4	Cobalt	6.9	Yes	Y		1.9	mg/Kg
138-080211-0005	08/02/2011 C-109	10/04/2011 AN03572	7440-47-3	Chromium	31	Yes	Y		0.47	mg/Kg
138-080211-0005	08/02/2011 C-109	10/04/2011 AN03572	7440-50-4	Copper	130	Yes	Y		0.90	mg/Kg
138-080211-0005	08/02/2011 C-109	10/04/2011 AN03572	7439-89-4	Iron	16,000	Yes	Y		4.7	mg/Kg
138-080211-0005	08/02/2011 C-109	10/04/2011 AN03572	7440-09-7	Potassium	1,100	Yes	Y		47	mg/Kg
138-080211-0005	08/02/2011 C-109	10/04/2011 AN03572	7439-95-4	Magnesium	17,000	Yes	Y		47	mg/Kg
138-080211-0005	08/02/2011 C-109	10/04/2011 AN03572	7439-96-5	Manganese	310	Yes	Y		0.47	mg/Kg
138-080211-0005	08/02/2011 C-109	10/04/2011 AN03572	7440-23-5	Sodium	140	Yes	Y		94	mg/Kg
138-080211-0005	08/02/2011 C-109	10/04/2011 AN03572	7440-02-0	Nickel	57	Yes	Y		1.9	mg/Kg
138-080211-0005	08/02/2011 C-109	10/04/2011 AN03572	7439-92-1	Lead	470	Yes	Y		0.75	mg/Kg
138-080211-0005	08/02/2011 C-109	10/04/2011 AN03572	7440-36-0	Antimony	---	Yes	N	U	1.9	mg/Kg
138-080211-0005	08/02/2011 C-109	10/04/2011 AN03572	7782-49-2	Selenium	---	Yes	N	U	1.9	mg/Kg
138-080211-0005	08/02/2011 C-109	10/04/2011 AN03572	7440-28-0	Thallium	---	Yes	N	U	1.9	mg/Kg
138-080211-0005	08/02/2011 C-109	10/04/2011 AN03572	7440-62-2	Vanadium	23	Yes	Y		1.9	mg/Kg
138-080211-0005	08/02/2011 C-109	10/04/2011 AN03572	7440-66-6	Zinc	240	Yes	Y		1.9	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7440-22-4	Silver	---	Yes	N	U	0.44	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7429-90-5	Aluminum	5,100	Yes	Y		8.8	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7440-38-2	Arsenic	7.8	Yes	Y		0.70	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7440-39-3	Barium	290	Yes	Y		8.8	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7440-41-7	Beryllium	---	Yes	N	U	0.26	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7440-70-2	Calcium	9,400	Yes	Y		44	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7440-43-9	Cadmium	0.40	Yes	Y		0.26	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7440-48-4	Cobalt	8.5	Yes	Y		1.8	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7440-47-3	Chromium	21	Yes	Y		0.44	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7440-50-8	Copper	180	Yes	Y		0.90	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7439-89-4	Iron	22,000	Yes	Y		4.4	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7440-09-7	Potassium	670	Yes	Y		44	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7439-95-4	Magnesium	5,400	Yes	Y		44	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7439-96-5	Manganese	190	Yes	Y		0.44	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7440-23-5	Sodium	200	Yes	Y		88	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7440-02-0	Nickel	120	Yes	Y		1.8	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7439-92-1	Lead	1,500	Yes	Y		0.70	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7440-36-0	Antimony	2.5	Yes	Y		1.8	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7782-49-2	Selenium	---	Yes	N	U	1.8	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7440-28-0	Thallium	---	Yes	N	U	1.8	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7440-62-2	Vanadium	21	Yes	Y		1.8	mg/Kg
138-080211-0010	08/02/2011 C-109	10/04/2011 AN03573	7440-66-6	Zinc	290	Yes	Y		1.8	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7440-22-4	Silver	---	Yes	N	U	0.46	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7429-90-5	Aluminum	9,100	Yes	Y		9.3	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7440-38-2	Arsenic	6.0	Yes	Y		0.74	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7440-39-3	Barium	54	Yes	Y		9.3	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7440-41-7	Beryllium	0.49	Yes	Y		0.28	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7440-70-2	Calcium	1,900	Yes	Y		46	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7440-43-9	Cadmium	---	Yes	N	U	0.28	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7440-48-4	Cobalt	5.4	Yes	Y		1.9	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7440-47-3	Chromium	14	Yes	Y		0.46	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7440-50-8	Copper	11	Yes	Y		0.90	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7439-89-6	Iron	18,000	Yes	Y		4.6	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7440-09-7	Potassium	900	Yes	Y		46	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7439-95-4	Magnesium	1,800	Yes	Y		46	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7439-96-5	Manganese	320	Yes	Y		0.46	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7440-23-5	Sodium	---	Yes	N	U	93	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7440-02-0	Nickel	8.5	Yes	Y		1.9	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7439-92-1	Lead	42	Yes	Y		0.74	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7440-36-0	Antimony	---	Yes	N	U	1.9	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7782-49-2	Selenium	---	Yes	N	U	1.9	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7440-28-0	Thallium	---	Yes	N	U	1.9	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7440-62-2	Vanadium	23	Yes	Y		1.9	mg/Kg
138-080211-0015	08/02/2011 C-109	10/04/2011 AN03574	7440-66-6	Zinc	33	Yes	Y		1.9	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7440-22-4	Silver	---	Yes	N	U	0.47	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7429-90-5	Aluminum	3,900	Yes	Y		9.4	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7440-38-2	Arsenic	15	Yes	Y		0.75	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7440-39-3	Barium	80	Yes	Y		9.4	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7440-41-7	Beryllium	---	Yes	N	U	0.28	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7440-70-2	Calcium	2,700	Yes	Y		47	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7440-43-9	Cadmium	---	Yes	N	U	0.28	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7440-48-4	Cobalt	6.4	Yes	Y		1.9	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7440-47-3	Chromium	16	Yes	Y		0.47	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7440-50-8	Copper	71	Yes	Y		0.90	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7439-89-6	Iron	15,000	Yes	Y		4.7	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7440-09-7	Potassium	940	Yes	Y		47	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7439-95-4	Magnesium	1,800	Yes	Y		47	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7439-96-5	Manganese	170	Yes	Y		0.47	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7440-23-5	Sodium	1,900	Yes	Y		94	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7440-02-0	Nickel	27	Yes	Y		1.9	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7439-92-1	Lead	680	Yes	Y		0.75	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7440-36-0	Antimony	1.9	Yes	N	U	1.9	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7782-49-2	Selenium	---	Yes	N	U	1.9	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7440-28-0	Thallium	---	Yes	N	U	1.9	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7440-62-2	Vanadium	81	Yes	Y		1.9	mg/Kg
138-080211-0020	08/02/2011 C-109	10/04/2011 AN03575	7440-66-6	Zinc	210	Yes	Y		1.9	mg/Kg
138-080211-0025	08/02/2011 C-109	10/04/2011 AN03576	7440-22-4	Silver	---	Yes	N	U	0.44	mg/Kg
138-080211-0025	08/02/2011 C-109	10/04/2011 AN03576	7429-90-5	Aluminum	3,300	Yes	Y		8.8	mg/Kg
138-080211-0025	08/02/2011 C-109	10/04/2011 AN03576	7440-38-2	Arsenic	3.8	Yes	Y		0.70	mg/Kg
138-080211-0025	08/02/2011 C-109	10/04/2011 AN03576	7440-39-3	Barium	43	Yes	Y		8.8	mg/Kg
138-080211-0025	08/02/2011 C-109	10/04/2011 AN03576	7440-41-7	Beryllium	---	Yes	N	U	0.26	mg/Kg
138-080211-0025	08/02/2011 C-109	10/04/2011 AN03576	7440-70-2	Calcium	1,800	Yes	Y		44	mg/Kg
138-080211-0025	08/02/2011 C-109	10/04/2011 AN03576	7440-43-9	Cadmium	0.30	Yes	Y		0.26	mg/Kg
138-080211-0025	08/02/201									

138-080211-0030	08/02/2011 C-109	10/04/2011 AN03577	7440-70-2	Calcium	1,000	Yes	Y		46	mg/Kg
138-080211-0030	08/02/2011 C-109	10/04/2011 AN03577	7440-43-9	Cadmium	—	Yes	N	U	0.28	mg/Kg
138-080211-0030	08/02/2011 C-109	10/04/2011 AN03577	7440-48-4	Cobalt	6.8	Yes	Y		1.9	mg/Kg
138-080211-0030	08/02/2011 C-109	10/04/2011 AN03577	7440-47-3	Chromium	27	Yes	Y		0.46	mg/Kg
138-080211-0030	08/02/2011 C-109	10/04/2011 AN03577	7440-50-8	Copper	13	Yes	Y		0.90	mg/Kg
138-080211-0030	08/02/2011 C-109	10/04/2011 AN03577	7439-89-6	Iron	21,000	Yes	Y		4.6	mg/Kg
138-080211-0030	08/02/2011 C-109	10/04/2011 AN03577	7440-09-7	Potassium	1,000	Yes	Y		46	mg/Kg
138-080211-0030	08/02/2011 C-109	10/04/2011 AN03577	7439-95-4	Magnesium	2,100	Yes	Y		46	mg/Kg
138-080211-0030	08/02/2011 C-109	10/04/2011 AN03577	7439-96-5	Manganese	440	Yes	Y		0.46	mg/Kg
138-080211-0030	08/02/2011 C-109	10/04/2011 AN03577	7440-23-5	Sodium	150	Yes	Y		93	mg/Kg
138-080211-0030	08/02/2011 C-109	10/04/2011 AN03577	7440-02-0	Nickel	16	Yes	Y		1.9	mg/Kg
138-080211-0030	08/02/2011 C-109	10/04/2011 AN03577	7439-92-1	Lead	26	Yes	Y		0.74	mg/Kg
138-080211-0030	08/02/2011 C-109	10/04/2011 AN03577	7440-36-0	Antimony	—	Yes	N	U	1.9	mg/Kg
138-080211-0030	08/02/2011 C-109	10/04/2011 AN03577	7782-49-2	Selenium	—	Yes	N	U	1.9	mg/Kg
138-080211-0030	08/02/2011 C-109	10/04/2011 AN03577	7440-28-0	Thallium	—	Yes	N	U	1.9	mg/Kg
138-080211-0030	08/02/2011 C-109	10/04/2011 AN03577	7440-62-2	Vanadium	27	Yes	Y		1.9	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-66-6	Zinc	38	Yes	Y		1.9	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-22-4	Silver	—	Yes	N	U	0.44	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7429-90-5	Aluminum	11,000	Yes	Y		8.8	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-38-2	Arsenic	6.0	Yes	Y		0.70	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-39-3	Barium	35	Yes	Y		8.8	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-41-7	Beryllium	0.34	Yes	Y		0.26	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-70-2	Calcium	1,100	Yes	Y		44	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-43-9	Cadmium	—	Yes	N	U	0.26	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-48-4	Cobalt	5.8	Yes	Y		1.8	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-47-3	Chromium	15	Yes	Y		0.44	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-50-8	Copper	11	Yes	Y		0.90	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7439-89-6	Iron	19,000	Yes	Y		4.4	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-09-7	Potassium	740	Yes	Y		44	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7439-95-4	Magnesium	2,200	Yes	Y		44	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7439-96-5	Manganese	260	Yes	Y		0.44	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-23-5	Sodium	660	Yes	Y		88	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-02-0	Nickel	9.8	Yes	Y		1.8	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7439-92-1	Lead	18	Yes	Y		0.70	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-36-0	Antimony	—	Yes	N	U	1.8	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7782-49-2	Selenium	—	Yes	N	U	1.8	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-28-0	Thallium	—	Yes	N	U	1.8	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-62-2	Vanadium	24	Yes	Y		1.8	mg/Kg
138-080211-0035	08/02/2011 C-109	10/04/2011 AN03578	7440-66-6	Zinc	31	Yes	Y		1.8	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03578	7440-22-4	Silver	—	Yes	N	U	0.49	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7429-90-5	Aluminum	8,500	Yes	Y		9.8	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7440-38-2	Arsenic	4.2	Yes	Y		0.78	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7440-39-3	Barium	24	Yes	Y		9.8	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7440-41-7	Beryllium	0.36	Yes	Y		0.29	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7440-70-2	Calcium	7,100	Yes	Y		49	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7440-43-9	Cadmium	—	Yes	N	U	0.29	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7440-48-4	Cobalt	5.9	Yes	Y		2.0	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7440-47-3	Chromium	32	Yes	Y		0.49	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7440-50-8	Copper	12	Yes	Y		1.00	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7439-89-6	Iron	19,000	Yes	Y		4.9	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7440-09-7	Potassium	1,800	Yes	Y		49	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7439-95-4	Magnesium	3,900	Yes	Y		49	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7439-96-5	Manganese	320	Yes	Y		0.49	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7440-23-5	Sodium	2,700	Yes	Y		98	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7440-02-0	Nickel	22	Yes	Y		2.0	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7439-92-1	Lead	49	Yes	Y		0.78	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7440-36-0	Antimony	—	Yes	N	U	2.0	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7782-49-2	Selenium	—	Yes	N	U	2.0	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7440-28-0	Thallium	—	Yes	N	U	2.0	mg/Kg
138-080211-0040	08/02/2011 C-109	10/04/2011 AN03579	7440-62-2	Vanadium	23	Yes	Y		2.0	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-66-6	Zinc	41	Yes	Y		2.0	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-22-4	Silver	—	Yes	N	U	0.42	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7429-90-5	Aluminum	6,200	Yes	Y		8.3	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-38-2	Arsenic	4.8	Yes	Y		0.67	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-39-3	Barium	99	Yes	Y		8.3	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-41-7	Beryllium	0.62	Yes	Y		0.25	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-70-2	Calcium	23,000	Yes	Y		42	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-43-9	Cadmium	—	Yes	N	U	0.25	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-48-4	Cobalt	7.4	Yes	Y		1.7	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-47-3	Chromium	23	Yes	Y		0.42	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-50-8	Copper	83	Yes	Y		0.80	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7439-89-6	Iron	17,000	Yes	Y		4.2	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-09-7	Potassium	1,300	Yes	Y		42	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7439-95-4	Magnesium	14,000	Yes	Y		42	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7439-96-5	Manganese	300	Yes	Y		0.42	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-23-5	Sodium	170	Yes	Y		83	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-02-0	Nickel	57	Yes	Y		1.7	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7439-92-1	Lead	390	Yes	Y		0.67	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-36-0	Antimony	—	Yes	N	U	1.7	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7782-49-2	Selenium	—	Yes	N	U	1.7	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-28-0	Thallium	—	Yes	N	U	1.7	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-62-2	Vanadium	22	Yes	Y		1.7	mg/Kg
138-080211-0041	08/02/2011 C-109	10/04/2011 AN03580	7440-43-9	Cadmium	—	Yes	N	U	3	ug/L
138-080211-0002	08/10/2011 C-109	08/25/2011 AN03594	7429-90-5	Aluminum	—	Yes	N	U	20	ug/L
138-080211-0002	08/10/2011 C-109	08/25/2011 AN03594	7440-38-2	Arsenic	—	Yes	N	U	8	ug/L
138-080211-0002	08/10/2011 C-109	08/25/2011 AN03594	7440-39-3	Barium	—	Yes	N	U	100	ug/L
138-080211-0002	08/10/2011 C-109	08/25/2011 AN03594	7440-41-7	Beryllium	—	Yes	N	U	3	ug/L
138-080211-0002	08/10/2011 C-109	08/25/2011 AN03594	7440-43-9	Cadmium	—	Yes	N	U	500	ug/L
138-080211-0002	08/10/2011 C-109									

138-081011-0031	09/13/2011 C-109	10/05/2011 AN03637	7439-96-5 Manganese, II	Yes	Y	5
138-081011-0031	09/13/2011 C-109	10/05/2011 AN03637	7440-23-5 Sodium, DI: 2,800,000	Yes	Y	1000
138-081011-0031	09/13/2011 C-109	10/05/2011 AN03637	7440-02-4 Nickel, DIS	Yes	N	ug/L
138-081011-0031	09/13/2011 C-109	10/05/2011 AN03637	7439-92-1 Lead, DISS	Yes	N	ug/L
138-081011-0031	09/13/2011 C-109	10/05/2011 AN03637	7440-36-0 Antimony, I	Yes	N	ug/L
138-081011-0031	09/13/2011 C-109	10/05/2011 AN03637	7782-49-2 Selenium, L	Yes	N	ug/L
138-081011-0031	09/13/2011 C-109	10/05/2011 AN03637	7440-28-0 Thallium, D	Yes	N	ug/L
138-081011-0031	09/13/2011 C-109	10/05/2011 AN03637	7440-62-2 Vanadium, I	Yes	N	ug/L
138-081011-0031	09/13/2011 C-109	10/05/2011 AN03637	7440-66-6 Zinc, DISSC	Yes	N	ug/L
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7440-22-4 Silver	Yes	N	5
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7429-90-5 Aluminum	Yes	N	100
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7440-38-2 Arsenic	Yes	N	ug/L
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7440-39-3 Barium	Yes	N	ug/L
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7440-41-7 Beryllium	Yes	N	ug/L
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7440-70-2 Calcium	140,000	Yes	500
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7440-43-9 Cadmium	Yes	N	ug/L
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7440-48-4 Cobalt	Yes	N	ug/L
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7440-47-3 Chromium	Yes	N	ug/L
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7440-50-8 Copper	Yes	N	ug/L
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7439-89-6 Iron	310	Yes	50
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7440-09-7 Potassium	120,000	Yes	ug/L
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7439-95-4 Magnesium	370,000	Yes	ug/L
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7439-96-5 Manganese	120	Yes	5
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7440-23-5 Sodium	2,700,000	Yes	1000
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7440-02-0 Nickel	Yes	N	ug/L
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7439-92-1 Lead	75	Yes	ug/L
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7440-36-0 Antimony	Yes	N	ug/L
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7782-49-2 Selenium	Yes	N	ug/L
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7440-28-0 Thallium	Yes	N	ug/L
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7440-62-2 Vanadium	Yes	N	ug/L
138-081011-0032	09/13/2011 C-109	10/05/2011 AN03638	7440-66-6 Zinc, DISS	Yes	N	ug/L
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7440-39-3 Barium	Yes	N	ug/L
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7440-41-7 Beryllium, I	Yes	N	3
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7440-70-2 Calcium, DI 120,000	Yes	Y	500
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7440-43-9 Cadmium, I	Yes	N	ug/L
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7440-48-4 Cobalt, DIS	Yes	N	ug/L
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7440-47-3 Chromium	Yes	N	ug/L
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7440-50-8 Copper, DIS	Yes	N	ug/L
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7439-89-6 Iron, DISSC 400	Yes	Y	50
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7440-09-7 Potassium, 1110,000	Yes	Y	500
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7439-95-4 Magnesium	340,000	Yes	ug/L
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7439-96-5 Manganese	170	Yes	5
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7440-23-5 Sodium	2,700,000	Yes	1000
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7440-02-0 Nickel, DIS	Yes	N	ug/L
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7439-92-1 Lead, DISS 27	Yes	Y	8
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7440-36-0 Antimony, I	Yes	N	ug/L
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7782-49-2 Selenium, L	Yes	N	ug/L
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7440-28-0 Thallium, D	Yes	N	ug/L
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03639	7440-62-2 Vanadium, I	Yes	N	ug/L
138-081011-0033	09/13/2011 C-109	10/05/2011 AN03640	7440-66-6 Zinc, DISS	Yes	N	ug/L
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7440-22-4 Silver	Yes	N	5
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7492-90-5 Aluminum	Yes	N	100
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7440-38-2 Arsenic	Yes	N	ug/L
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7440-39-3 Barium	Yes	N	100
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7440-41-7 Beryllium	Yes	N	3
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7440-70-2 Calcium	120,000	Yes	500
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7440-43-9 Cadmium	Yes	N	ug/L
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7440-48-4 Cobalt	Yes	N	ug/L
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7440-47-3 Chromium	Yes	N	ug/L
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7440-50-8 Copper	Yes	N	ug/L
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7439-89-6 Iron	420	Yes	50
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7440-09-7 Potassium	110,000	Yes	500
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7439-95-4 Magnesium	340,000	Yes	ug/L
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7439-96-5 Manganese	130	Yes	5
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7440-23-5 Sodium	2,500,000	Yes	1000
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7440-02-0 Nickel	Yes	N	ug/L
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7439-92-1 Lead	280	Yes	8
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7440-36-0 Antimony	Yes	N	ug/L
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7782-49-2 Selenium	Yes	N	ug/L
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7440-28-0 Thallium	Yes	N	ug/L
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7440-62-2 Vanadium	Yes	N	ug/L
138-081011-0034	09/13/2011 C-109	10/05/2011 AN03640	7440-66-6 Zinc	Yes	N	ug/L
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7440-22-4 Silver, DISS	Yes	N	5
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7429-90-5 Aluminum	Yes	N	100
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7440-38-2 Arsenic, DI	Yes	N	ug/L
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7440-39-3 Barium	Yes	N	100
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7440-41-7 Beryllium, I	Yes	N	3
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7440-70-2 Calcium, DI 160,000	Yes	Y	500
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7440-43-9 Cadmium, I	Yes	N	ug/L
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7440-48-4 Cobalt, DIS	Yes	N	20
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7440-47-3 Chromium	Yes	N	5
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7440-50-8 Copper, DI	Yes	N	10
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7439-89-6 Iron, DISSC 62	Yes	Y	50
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7440-09-7 Potassium	1140,000	Yes	500
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7439-95-4 Magnesium	370,000	Yes	ug/L
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7439-96-5 Manganese	1,800	Yes	5
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7440-23-5 Sodium, DI: 2,900,000	Yes	Y	1000
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7440-02-0 Nickel, DIS	Yes	N	ug/L
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7439-92-1 Lead, DISS	Yes	N	8
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7440-36-0 Antimony, I	Yes	N	ug/L
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7782-49-2 Selenium, L	Yes	N	20
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7440-28-0 Thallium, D	Yes	N	ug/L
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7440-62-2 Vanadium, I	Yes	N	20
138-081011-0035	09/13/2011 C-109	10/05/2011 AN03641	7440-66-6 Zinc, DISS	Yes	N	ug/L
138-082011-0042	08/25/2011 C-109	08/25/2011 AN03581	7440-28-0 Thallium	—	Yes	ug/L
138-082011-0042	08/25/2011 C-109	08/25/2011 AN03581	7440-62-2 Vanadium	—	Yes	ug/L
138-082011-0042	08/25/2011 C-109	08/25/2011 AN03581	7440-66-6 Zinc	—	Yes	ug/L
138-082011-0042	08/25/2011 C-109	08/25/2011 AN03582	7440-22-4 Silver	—	Yes	5
138-082011-0042	08/25/2011 C-109	08/25/2011 AN03582	7429-90-5 Arsenic	—	Yes	ug/L
138-082011-0042	08/25/2011 C-109	08/25/2011 AN03582	7440-39-3 Barium	—	Yes	100
138-082011-0042	08/25/2011 C-109	08/25/2011 AN03582	7440-41-7 Beryllium	—	Yes	3
138-082011-0042	08/25/2011 C-109	08/25/2011 AN03582	7440-70-2 Calcium	—	Yes	500
138-082011-0042	08/25/2011 C-109	08/25/2011 AN03582	7440-43-9 Cadmium	—	Yes	ug/L
138-082011-0042	08/25/2011 C-109	08/25/2011 AN03582	7440-48-4 Cobalt	—	Yes	20
138-082011-0042	08/25/2011 C-109	08/25/2011 AN03582	7440-47-3 Chromium	—	Yes	5
138-082011-0042	08/25/2011 C-109	08/25/2011 AN03582	7440-50-8 Copper	—	Yes	ug/L
138-082011-0042	08/25/2011 C-109	08/25/2011 AN03582	7440-23-5 Sodium	—	Yes	100
138-082011-0042	08/25/2011 C-109	08/25/2011 AN03582	7440-66-6 Zinc, DISS	—	Yes	ug/L

138-081011-0030	08/10/2011 C-109	08/25/2011 AN03622	7440-50-8	Copper	---	Yes	N	U	20	ug/L
138-081011-0030	08/10/2011 C-109	08/25/2011 AN03622	7439-89-6	Iron	---	Yes	N	U	50	ug/L
138-081011-0030	08/10/2011 C-109	08/25/2011 AN03622	7440-09-7	Potassium	---	Yes	N	U	500	ug/L
138-081011-0030	08/10/2011 C-109	08/25/2011 AN03622	7439-95-4	Magnesium	---	Yes	N	U	500	ug/L
138-081011-0030	08/10/2011 C-109	08/25/2011 AN03622	7439-96-5	Manganese	---	Yes	N	U	5	ug/L
138-081011-0030	08/10/2011 C-109	08/25/2011 AN03622	7440-23-5	Sodium	---	Yes	N	U	1000	ug/L
138-081011-0030	08/10/2011 C-109	08/25/2011 AN03622	7440-02-0	Nickel	---	Yes	N	U	20	ug/L
138-081011-0030	08/10/2011 C-109	08/25/2011 AN03622	7439-92-1	Lead	---	Yes	N	U	8	ug/L
138-081011-0030	08/10/2011 C-109	08/25/2011 AN03622	7440-36-0	Antimony	---	Yes	N	U	20	ug/L
138-081011-0030	08/10/2011 C-109	08/25/2011 AN03622	7782-49-2	Selenium	---	Yes	N	U	40	ug/L
138-081011-0030	08/10/2011 C-109	08/25/2011 AN03622	7440-28-0	Thallium	---	Yes	N	U	20	ug/L
138-081011-0030	08/10/2011 C-109	08/25/2011 AN03622	7440-62-2	Vanadium	---	Yes	N	U	20	ug/L
138-081011-0030	08/10/2011 C-109	08/25/2011 AN03622	7440-66-6	Zinc	---	Yes	N	U	20	ug/L
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7440-22-4	Silver	---	Yes	N	U	0.53	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7429-90-5	Aluminum	2,800	Yes	Y		11.0	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7440-38-2	Arsenic	200	Yes	Y		0.84	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7440-39-3	Barium	200	Yes	Y		11.0	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7440-41-7	Beryllium	---	Yes	N	U	0.32	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7440-70-2	Calcium	37,000	Yes	Y		53	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7440-43-9	Cadmium	0.56	Yes	Y		0.32	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7440-48-4	Cobalt	5.2	Yes	Y		2.1	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7440-47-3	Chromium	38	Yes	Y		0.53	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7440-50-8	Copper	140	Yes	Y		1.10	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7439-89-6	Iron	100,000	Yes	Y		53.0	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7440-09-7	Potassium	11,000	Yes	Y		53	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7439-95-4	Magnesium	17,000	Yes	Y		53	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7439-96-5	Manganese	340	Yes	Y		0.53	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7440-23-5	Sodium	4,200	Yes	Y		110	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7440-02-0	Nickel	13	Yes	Y		2.1	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7439-92-1	Lead	21,000	Yes	Y		8.43	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7440-36-0	Antimony	5.1	Yes	Y		2.1	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7782-49-2	Selenium	13	Yes	Y		2.1	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7440-28-0	Thallium	---	Yes	N	U	2.1	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7440-62-2	Vanadium	30	Yes	Y		2.1	mg/Kg
138-081011-0001	08/11/2011 C-109	08/25/2011 AN03623	7440-66-6	Zinc	120	Yes	Y		2.1	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7440-70-2	Calcium	8,500	Yes	Y		82	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7440-43-9	Cadmium	0.90	Yes	Y		0.49	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7440-48-4	Cobalt	12	Yes	Y		3.3	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7440-47-3	Chromium	100	Yes	Y		0.82	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7440-50-8	Copper	280	Yes	Y		1.6	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7439-89-6	Iron	36,000	Yes	Y		8.2	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7440-09-7	Potassium	3,100	Yes	Y		82	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7439-95-4	Magnesium	8,900	Yes	Y		82	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7439-96-5	Manganese	510	Yes	Y		0.82	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7440-23-5	Sodium	5,800	Yes	Y		160	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7440-02-0	Nickel	78	Yes	Y		3.3	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7439-92-1	Lead	1,600	Yes	Y		1.31	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7440-36-0	Antimony	---	Yes	N	U	3.3	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7782-49-2	Selenium	---	Yes	N	U	3.3	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7440-28-0	Thallium	---	Yes	N	U	3.3	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7440-62-2	Vanadium	39	Yes	Y		3.3	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7440-66-6	Zinc	330	Yes	Y		3.3	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7440-22-4	Silver	1.4	Yes	Y		0.82	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7429-90-5	Aluminum	17,000	Yes	Y		16	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7440-38-2	Arsenic	74	Yes	Y		1.31	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7440-39-3	Barium	140	Yes	Y		16.0	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7440-41-7	Beryllium	0.81	Yes	Y		0.49	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7440-70-2	Calcium	5,500	Yes	Y		82	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7440-43-9	Cadmium	0.80	Yes	Y		0.49	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7440-48-4	Cobalt	13	Yes	Y		3.3	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7440-47-3	Chromium	100	Yes	Y		0.82	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7440-50-8	Copper	260	Yes	Y		1.6	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7439-89-6	Iron	35,000	Yes	Y		8.2	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7440-09-7	Potassium	3,100	Yes	Y		82	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7439-95-4	Magnesium	33,000	Yes	Y		53	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7439-96-5	Manganese	0.54	Yes	Y		0.32	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7440-23-5	Sodium	4,400	Yes	Y		110	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7440-02-0	Nickel	8.5	Yes	Y		2.1	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7439-92-1	Lead	29,000	Yes	Y		8.50	mg/Kg
138-081111-0006	09/13/2011 C-109	10/05/2011 AN03660	7440-36-0	Antimony	---	Yes	N	U	2.1	mg/Kg
138-081111-0001	09/11/2011 C-109	08/25/2011 AN03624	7440-09-7	Potassium	470	Yes	Y		110	mg/Kg
138-081111-0001	09/11/2011 C-109	08/25/2011 AN03624	7439-95-4	Magnesium	8,400	Yes	Y		53	mg/Kg
138-081111-0001	09/11/2011 C-109	08/25/2011 AN03624	7439-96-5	Manganese	1,600	Yes	Y		0.53	mg/Kg
138-081111-0001	09/11/2011 C-109	08/25/2011 AN03624	7440-23-5	Sodium	4,400	Yes	Y		110	mg/Kg
138-081111-0001	09/11/2011 C-109	08/25/2011 AN03624	7440-02-0	Nickel	8.5	Yes	Y		2.1	mg/Kg
138-081111-0001	09/11/2011 C-109	08/25/2011 AN03624	7439-92-1	Lead	29,000	Yes	Y		8.50	mg/Kg
138-081111-0001	09/11/2011 C-109	08/25/2011 AN03624	7440-38-2	Antimony	---	Yes	N	U	2.1	mg/Kg
138-081111-0001	09/11/2011 C-109	08/25/2011 AN03624	7782-49-2	Selenium	---	Yes	N	U	2.1	mg/Kg
138-081111-0001	09/11/2011 C-109	08/25/2011 AN03624	7440-28-0	Thallium	---	Yes	N	U	2.1	mg/Kg
138-081111-0002	09/11/2011 C-109	08/25/2011 AN03624	7440-62-2	Vanadium	13	Yes	Y		0.46	mg/Kg
138-081111-0002	09/11/2011 C-109	08/25/2011 AN03624	7440-66-6	Zinc	61	Yes	Y		0.46	mg/Kg
138-081111-0002	09/11/2011 C-109	08/25/2011 AN03625	7440-22-4	Silver	---	Yes	N	U	9	mg/Kg
138-081111-0002	09/11/2011 C-109	08/25/2011 AN03625	7429-90-5	Aluminum	3,800	Yes	Y		0.73	mg/Kg
138-081111-0002	09/11/2011 C-109	08/25/2011 AN03625	7440-38-2	Arsenic	7.0	Yes	Y		9	mg/Kg
138-081111-0002	09/11/2011 C-109	08/25/2011 AN03625	7440-39-3	Barium	41	Yes	Y		0.27	mg/Kg
138-081111-0002	09/11/2011 C-109	08/25/2011 AN03625	7440-41-7	Beryllium	---	Yes	N	U	46	mg/Kg
138-081111-0002	09/11/2011 C-109	08/25/2011 AN03625	7440-70-2	Calcium	24,000	Yes	Y		0.27	mg/Kg
138-081111-0002	09/11/2011 C-109	08/25/2011 AN03625	7440-43-9	Cadmium	---	Yes	N	U	1.8	mg/Kg
138-081111-0002	09/11/2011 C-109	08/25								

138-081111-0009	09/13/2011 C-109	10/05/2011 AN03663	7440-23-5	Sodium	870	Yes	Y	130	mg/Kg	
138-081111-0009	09/13/2011 C-109	10/05/2011 AN03663	7440-02-0	Nickel	35	Yes	Y	2.5	mg/Kg	
138-081111-0009	09/13/2011 C-109	10/05/2011 AN03663	7439-92-1	Lead	380	Yes	Y	1.02	mg/Kg	
138-081111-0009	09/13/2011 C-109	10/05/2011 AN03663	7440-36-0	Antimony	—	Yes	N	U	2.5	mg/Kg
138-081111-0009	09/13/2011 C-109	10/05/2011 AN03663	7782-49-2	Selenium	—	Yes	N	U	2.5	mg/Kg
138-081111-0009	09/13/2011 C-109	10/05/2011 AN03663	7440-28-0	Thallium	—	Yes	N	U	2.5	mg/Kg
138-081111-0009	09/13/2011 C-109	10/05/2011 AN03663	7440-62-2	Vanadium	41	Yes	Y	2.5	mg/Kg	
138-081111-0009	09/13/2011 C-109	10/05/2011 AN03663	7440-66-6	Zinc	150	Yes	Y	2.5	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7440-22-4	Silver	4.2	Yes	Y	0.66	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7429-90-5	Aluminum	16,000	Yes	Y	13	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7440-38-2	Arsenic	62	Yes	Y	1.05	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7440-39-3	Barium	260	Yes	Y	13	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7440-41-7	Beryllium	0.78	Yes	Y	0.39	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7440-70-2	Calcium	6,000	Yes	Y	66	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7440-43-9	Cadmium	1.5	Yes	Y	0.39	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7440-48-4	Cobalt	11	Yes	Y	2.6	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7440-47-3	Chromium	180	Yes	Y	0.66	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7440-50-8	Copper	370	Yes	Y	1.3	mg/Kg	
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03656	7440-70-2	Calcium, DI	160,000	Yes	Y	500	ug/L	
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03656	7440-43-9	Cadmium, I	—	Yes	N	U	3	ug/L
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03656	7440-48-0	Cobalt, DIS	—	Yes	N	U	20	ug/L
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03656	7440-47-3	Chromium, —	—	Yes	N	U	5	ug/L
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03656	7440-50-8	Copper, DI	—	Yes	N	U	10	ug/L
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03656	7439-89-6	Iron, DISSC	61	Yes	Y	50	ug/L	
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03656	7440-09-7	Potassium, I	140,000	Yes	Y	500	ug/L	
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03656	7439-95-4	Magnesium, 370,000	Yes	Y	500	ug/L		
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03656	7439-96-5	Manganese, I,800	Yes	Y	5	ug/L		
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03656	7440-23-5	Sodium, DI	3,000,000	Yes	Y	1000	ug/L	
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03656	7440-02-0	Nickel, DIS	—	Yes	N	U	20	ug/L
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03656	7439-92-1	Lead, DISS	—	Yes	N	U	8	ug/L
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03656	7440-36-0	Antimony, I	—	Yes	N	U	20	ug/L
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03657	7782-49-2	Selenium, I	—	Yes	N	U	20	ug/L
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03656	7440-28-0	Thallium, D	—	Yes	N	U	20	ug/L
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03656	7440-62-2	Vanadium,	—	Yes	N	U	20	ug/L
138-081011-0051	09/13/2011 C-109	10/05/2011 AN03656	7440-66-6	Zinc, DISSC	—	Yes	N	U	20	ug/L
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7440-22-4	Silver	2.6	Yes	Y	0.79	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7429-90-5	Aluminum	17,000	Yes	Y	16	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7440-38-2	Arsenic	87	Yes	Y	1.26	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7440-39-3	Barium	150	Yes	Y	16	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7440-41-7	Beryllium	1.2	Yes	Y	0.47	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7440-70-2	Calcium	5,300	Yes	Y	79	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7440-43-9	Cadmium	1.1	Yes	Y	0.47	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7440-48-4	Cobalt	14	Yes	Y	3.2	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7440-47-3	Chromium	110	Yes	Y	0.79	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7440-50-8	Copper	440	Yes	Y	1.6	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7439-89-6	Iron	40,000	Yes	Y	7.9	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7440-09-7	Potassium	3,300	Yes	Y	79	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7439-94-4	Magnesium	7,800	Yes	Y	79	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7439-96-5	Manganese	380	Yes	Y	0.79	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7440-23-5	Sodium	6,900	Yes	Y	160	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7440-02-0	Nickel	88	Yes	Y	3.2	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7439-92-1	Lead	1,800	Yes	Y	1.26	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7440-36-0	Antimony	—	Yes	N	U	3.2	mg/Kg
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7782-49-2	Selenium	—	Yes	N	U	3.2	mg/Kg
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7440-62-2	Vanadium	43	Yes	Y	3.2	mg/Kg	
138-081111-0003	09/13/2011 C-109	10/05/2011 AN03657	7440-66-6	Zinc	490	Yes	Y	3.2	mg/Kg	
138-081111-0003	09/13/2011 C-110	10/07/2011 AN03657	7439-97-6	MERCURY	5.1	Yes	Y	0.05	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7440-22-4	Silver	1.7	Yes	Y	0.80	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7429-90-5	Aluminum	16,000	Yes	Y	16	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7440-38-2	Arsenic	76	Yes	Y	1.28	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7440-39-3	Barium	150	Yes	Y	16.0	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7440-41-7	Beryllium	0.78	Yes	Y	0.48	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7440-70-2	Calcium	5,400	Yes	Y	80	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7440-43-9	Cadmium	1.0	Yes	Y	0.48	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7440-48-4	Cobalt	12	Yes	Y	3.2	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7440-47-3	Chromium	100	Yes	Y	0.80	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7440-50-8	Copper	280	Yes	Y	1.6	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7439-89-6	Iron	33,000	Yes	Y	8.0	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7440-09-7	Potassium	3,200	Yes	Y	80	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7439-95-4	Magnesium	7,100	Yes	Y	80	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7439-96-5	Manganese	500	Yes	Y	0.80	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7440-23-5	Sodium	7,400	Yes	Y	160	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7440-02-0	Nickel	81	Yes	Y	3.2	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7439-92-1	Lead	1,500	Yes	Y	1.28	mg/Kg	
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7440-36-0	Antimony	—	Yes	N	U	3.2	mg/Kg
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7782-49-2	Selenium	—	Yes	N	U	3.2	mg/Kg
138-081111-0004	09/13/2011 C-109	10/05/2011 AN03658	7440-28-0	Thallium	—	Yes	N	U	3.2	mg/Kg
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7440-24-4	Silver	1.6	Yes	Y	0.82	mg/Kg	
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7429-90-5	Aluminum	17,000	Yes	Y	16	mg/Kg	
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7440-38-2	Arsenic	78	Yes	Y	1.31	mg/Kg	
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7440-39-3	Barium	150	Yes	Y	16.0	mg/Kg	
138-081111-0005	09/13/2011 C-109	10/05/2011 AN03659	7440-41-7	Beryllium	0.82	Yes	Y	0.49	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7439-96-5	Iron	34,000	Yes	Y	6.6	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7440-09-7	Potassium	3,000	Yes	Y	130	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7439-95-4	Magnesium	8,000	Yes	Y	66	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7439-96-5	Manganese	450	Yes	Y	0.66	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7440-23-5	Sodium	9,200	Yes	Y	130	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7440-42-0	Nickel	59	Yes	Y	2.6	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7439-92-1	Lead	820	Yes	Y	1.05	mg/Kg	
138-081111-0050	09/13/2011 C-109	10/05/2011 AN03686	7440-36-0	Antimony	—	Yes	N	U	2.6	mg/Kg
138-081111-0050	09									

138-081111-0055	09/13/2011 C-109	10/05/2011 AN03691 7440-02-0	Nickel 70	Yes Y		2.9	mg/Kg
138-081111-0055	09/13/2011 C-109	10/05/2011 AN03691 7439-92-1	Lead 1,300	Yes Y	U	1.17	mg/Kg
138-081111-0055	09/13/2011 C-109	10/05/2011 AN03691 7440-36-0	Antimony 4.8	Yes Y		2.9	mg/Kg
138-081111-0055	09/13/2011 C-109	10/05/2011 AN03691 7782-49-2	Selenium ---	Yes N	U	2.9	mg/Kg
138-081111-0055	09/13/2011 C-109	10/05/2011 AN03691 7440-28-0	Thallium ---	Yes N	U	2.9	mg/Kg
138-081111-0055	09/13/2011 C-109	10/05/2011 AN03691 7440-62-2	Vanadium 53	Yes Y		2.9	mg/Kg
138-081111-0055	09/13/2011 C-109	10/05/2011 AN03691 7440-66-6	Zinc 630	Yes Y		2.9	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7440-22-4	Silver 3.0	Yes Y		0.68	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7429-90-5	Aluminum 14,000	Yes Y		14	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7440-38-2	Arsenic 79	Yes Y		1.09	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7440-39-3	Barium 220	Yes Y		14	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7440-41-7	Beryllium 0.72	Yes Y		0.41	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7440-70-2	Calcium 5,000	Yes Y		68	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7440-43-9	Cadmium 1.6	Yes Y		0.41	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7440-48-4	Cobalt 11	Yes Y		2.7	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7440-47-3	Chromium 150	Yes Y		0.68	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7440-50-8	Copper 310	Yes Y		1.4	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7439-89-6	Iron 33,000	Yes Y		6.8	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7409-07-9	Potassium 2,600	Yes Y		140	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7439-95-4	Magnesium 6,700	Yes Y		68	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7439-96-5	Manganese 420	Yes Y		0.68	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7440-23-5	Sodium 5,600	Yes Y		140	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7440-02-0	Nickel 68	Yes Y		2.7	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7439-92-1	Lead 1,400	Yes Y		1.09	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7440-36-0	Antimony 5.9	Yes Y		2.7	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7782-49-2	Selenium —	Yes N	U	2.7	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7440-28-0	Thallium —	Yes N	U	2.7	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7440-62-2	Vanadium 50	Yes Y		2.7	mg/Kg
138-081111-0056	09/13/2011 C-109	10/05/2011 AN03692 7440-66-6	Zinc 600	Yes Y		2.7	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7440-22-4	Silver 1.7	Yes Y		0.80	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7429-90-5	Aluminum 16,000	Yes Y		16	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7440-38-2	Arsenic 85	Yes Y		1.28	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7440-47-3	Chromium 120	Yes Y		0.80	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7440-50-8	Copper 290	Yes Y		1.6	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7439-89-6	Iron 38,000	Yes Y		8.0	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7440-09-7	Potassium 3,100	Yes Y		160	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7439-95-4	Magnesium 7,400	Yes Y		80	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7439-96-5	Manganese 590	Yes Y		0.80	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7440-23-5	Sodium 6,700	Yes Y		160	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7440-02-0	Nickel 86	Yes Y		3.2	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7439-92-1	Lead 1,700	Yes Y		1.28	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7440-36-0	Antimony —	Yes N	U	3.2	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7782-49-2	Selenium —	Yes N	U	3.2	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7440-28-0	Thallium —	Yes N	U	3.2	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7440-62-2	Vanadium 40	Yes Y		3.2	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7440-66-6	Zinc 470	Yes Y		3.2	mg/Kg
138-081111-0057	09/13/2011 C-109	10/05/2011 AN03693 7440-97-6	MERCURY 4.1	Yes Y		0.05	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7440-22-4	Silver 1.5	Yes Y		0.65	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7429-90-5	Aluminum 17,000	Yes Y		13	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7440-38-2	Arsenic 75	Yes Y		1.05	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7440-39-3	Barium 130	Yes Y		13	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7440-41-7	Beryllium 0.80	Yes Y		0.39	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7440-43-9	Cadmium 0.70	Yes Y		0.39	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7440-48-4	Cobalt 13	Yes Y		2.6	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7440-47-3	Chromium 110	Yes Y		0.65	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7440-50-8	Copper 240	Yes Y		1.3	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7439-89-6	Iron 34,000	Yes Y		6.5	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7440-09-7	Potassium 2,700	Yes Y		130	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7439-95-4	Magnesium 6,700	Yes Y		65	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7439-96-5	Manganese 630	Yes Y		0.65	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7440-23-5	Sodium 1,700	Yes Y		130	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7440-02-0	Nickel 66	Yes Y		2.6	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7439-92-1	Lead 1,400	Yes Y		1.05	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7440-36-0	Antimony —	Yes N	U	2.6	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7782-49-2	Selenium —	Yes N	U	2.6	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7440-28-0	Thallium —	Yes N	U	2.6	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7440-62-2	Vanadium 43	Yes Y		2.6	mg/Kg
138-081111-0058	09/13/2011 C-109	10/05/2011 AN03694 7440-66-6	Zinc 360	Yes Y		2.6	mg/Kg
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7440-22-4	Silver —	Yes N	U	5	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7429-90-5	Aluminum —	Yes N	U	100	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7440-38-2	Arsenic —	Yes N	U	16	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7440-39-3	Barium —	Yes N	U	100	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7440-41-7	Beryllium —	Yes N	U	3	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7440-70-2	Calcium 240,000	Yes Y		500	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7440-43-9	Cadmium —	Yes N	U	3	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7440-48-4	Cobalt —	Yes N	U	20	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7440-47-3	Chromium —	Yes N	U	5	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7440-50-8	Copper —	Yes N	U	20	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7439-89-6	Iron 250	Yes Y		50	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7440-09-7	Potassium 240,000	Yes Y		500	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7439-95-4	Magnesium 730,000	Yes Y		500	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7439-96-5	Manganese 85	Yes Y		5	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7440-23-5	Sodium 6,300,000	Yes Y		1000	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7440-02-0	Nickel —	Yes N	U	20	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7439-92-1	Lead —	Yes N	U	16	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7440-36-0	Antimony —	Yes N	U	20	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7782-49-2	Selenium —	Yes N	U	40	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7440-28-0	Thallium —	Yes N	U	20	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7440-62-2	Vanadium —	Yes N	U	20	ug/L
138-081011-0008	08/10/2011 C-109	08/25/2011 AN03600 7440-66-6	Zinc —	Yes N	U	20	ug/L
138-081011-0009	08/10/2011 C-109	08/25/2011 AN03601 7440-22-4	Silver —	Yes N	U	5	ug/L
138-081011-0009	08/10/2011 C-109	08/25/2011 AN03601 7429-90-5	Aluminum —	Yes N	U	100	ug/L
138-081011-0009	08/10/2011 C-109	08/25/2011 AN03601 7440-38-2	Arsenic —	Yes N	U	16	ug/L
138-081011-0009	08/10/2011 C-109	08/25/2011 AN03601 7440-39-3	Barium —	Yes N	U	100	ug/L
138-081011-0009	08/10/2011 C-109	08/25/2011 AN03601 7440-41-7	Beryllium —	Yes N	U	3	ug/L
138-081011-0009	08/10/2011 C-109	08/25/2011 AN03601 7440-70-2	Calcium 240,000	Yes Y		500	ug/L
138-081011-0009	08/10/2011 C-109	08/25/2011 AN03601 7440-43-9	Cadmium —	Yes N	U	3	ug/L
138-081011-0009	08/10/2011 C-109	08/25/2011 AN03601 7440-48-4	Cobalt —	Yes N	U	20	ug/L
138-081011-0009	08/10/2011 C-109	08/25/2011 AN03601 7440-47-3	Chromium —	Yes N	U		

138-081111-0011	09/13/2011 C-109	10/05/2011 AN03665 7439-89-6 Iron	21,000	Yes	Y	4.7	mg/Kg	
138-081111-0011	09/13/2011 C-109	10/05/2011 AN03665 7440-09-7 Potassium	1,600	Yes	Y	94	mg/Kg	
138-081111-0011	09/13/2011 C-109	10/05/2011 AN03665 7439-95-4 Magnesium	4,000	Yes	Y	47	mg/Kg	
138-081111-0011	09/13/2011 C-109	10/05/2011 AN03665 7439-96-5 Manganese	410	Yes	Y	0.47	mg/Kg	
138-081111-0011	09/13/2011 C-109	10/05/2011 AN03665 7440-23-5 Sodium	490	Yes	Y	94	mg/Kg	
138-081111-0011	09/13/2011 C-109	10/05/2011 AN03665 7440-02-0 Nickel	18	Yes	Y	1.9	mg/Kg	
138-081111-0011	09/13/2011 C-109	10/05/2011 AN03665 7439-92-1 Lead	320	Yes	Y	0.75	mg/Kg	
138-081111-0011	09/13/2011 C-109	10/05/2011 AN03665 7440-36-0 Antimony	—	Yes	N	U	1.9	mg/Kg
138-081111-0011	09/13/2011 C-109	10/05/2011 AN03665 7782-49-2 Selenium	—	Yes	N	U	1.9	mg/Kg
138-081111-0011	09/13/2011 C-109	10/05/2011 AN03665 7440-28-0 Thallium	—	Yes	N	U	1.9	mg/Kg
138-081111-0011	09/13/2011 C-109	10/05/2011 AN03665 7440-62-2 Vanadium	25	Yes	Y	1.9	mg/Kg	
138-081111-0011	09/13/2011 C-109	10/05/2011 AN03665 7440-66-6 Zinc	55	Yes	Y	1.9	mg/Kg	
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7440-22-4 Silver	—	Yes	N	U	0.47	mg/Kg
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7429-90-5 Aluminum	4,400	Yes	Y	9	mg/Kg	
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7440-38-2 Arsenic	4.2	Yes	Y	0.75	mg/Kg	
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7440-39-3 Barium	10	Yes	Y	9	mg/Kg	
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7440-41-7 Beryllium	—	Yes	N	U	0.28	mg/Kg
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7440-70-2 Calcium	1,200	Yes	Y	47	mg/Kg	
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7440-43-9 Cadmium	—	Yes	N	U	0.28	mg/Kg
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7440-48-4 Cobalt	4.1	Yes	Y	1.9	mg/Kg	
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7440-47-3 Chromium	11	Yes	Y	0.47	mg/Kg	
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7440-50-8 Copper	4.3	Yes	Y	0.9	mg/Kg	
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7439-89-6 Iron	11,000	Yes	Y	4.7	mg/Kg	
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7440-09-7 Potassium	810	Yes	Y	93	mg/Kg	
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7439-95-4 Magnesium	2,200	Yes	Y	47	mg/Kg	
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7439-96-5 Manganese	130	Yes	Y	0.47	mg/Kg	
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7440-23-5 Sodium	1,200	Yes	Y	93	mg/Kg	
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7440-02-0 Nickel	8.4	Yes	Y	1.9	mg/Kg	
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7439-92-1 Lead	6.5	Yes	Y	0.75	mg/Kg	
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7440-36-0 Antimony	—	Yes	N	U	1.9	mg/Kg
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7782-49-2 Selenium	—	Yes	N	U	1.9	mg/Kg
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7440-28-0 Thallium	—	Yes	N	U	1.9	mg/Kg
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7440-62-2 Vanadium	13	Yes	Y	1.9	mg/Kg	
138-081111-0030	09/13/2011 C-109	10/05/2011 AN03666 7440-66-6 Zinc	31	Yes	Y	1.9	mg/Kg	
138-081111-0030	09/13/2011 C-110	10/07/2011 AN03666 7439-97-6 MERCURY	—	Yes	N	U	0.016	mg/Kg
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7440-22-4 Silver	—	Yes	N	U	0.51	mg/Kg
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7429-90-5 Aluminum	5,500	Yes	Y	10	mg/Kg	
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7440-38-2 Arsenic	3.7	Yes	Y	0.81	mg/Kg	
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7440-39-3 Barium	15	Yes	Y	10	mg/Kg	
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7440-41-7 Beryllium	0.61	Yes	Y	0.30	mg/Kg	
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7440-70-2 Calcium	970	Yes	Y	51	mg/Kg	
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7440-43-9 Cadmium	—	Yes	N	U	0.30	mg/Kg
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7440-48-4 Cobalt	8.0	Yes	Y	2.0	mg/Kg	
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7440-47-3 Chromium	15	Yes	Y	0.51	mg/Kg	
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7440-50-8 Copper	42	Yes	Y	1.0	mg/Kg	
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7439-89-6 Iron	14,000	Yes	Y	5.1	mg/Kg	
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7440-09-7 Potassium	940	Yes	Y	100	mg/Kg	
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7439-95-4 Magnesium	2,600	Yes	Y	51	mg/Kg	
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7439-96-5 Manganese	150	Yes	Y	0.51	mg/Kg	
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7440-23-5 Sodium	1,600	Yes	Y	100	mg/Kg	
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7440-02-0 Nickel	19	Yes	Y	2.0	mg/Kg	
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7439-92-1 Lead	45	Yes	Y	0.81	mg/Kg	
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7440-36-0 Antimony	—	Yes	N	U	2.0	mg/Kg
138-081111-0031	09/13/2011 C-109	10/05/2011 AN03667 7782-49-2 Selenium	—	Yes	N	U	2.0	mg/Kg
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7440-62-2 Vanadium	15	Yes	Y	2.0	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7440-66-6 Zinc	460	Yes	Y	2.0	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7440-22-4 Silver	—	Yes	N	U	0.55	mg/Kg
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7429-90-5 Aluminum	6,900	Yes	Y	11	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7440-38-2 Arsenic	4.9	Yes	Y	0.88	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7440-39-3 Barium	15	Yes	Y	11	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7440-41-7 Beryllium	0.37	Yes	Y	0.33	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7440-70-2 Calcium	1,200	Yes	Y	55	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7440-43-9 Cadmium	—	Yes	N	U	0.33	mg/Kg
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7440-48-4 Cobalt	5.9	Yes	Y	2.2	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7440-47-3 Chromium	17	Yes	Y	0.55	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7440-50-8 Copper	7.5	Yes	Y	1.1	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7439-89-6 Iron	17,000	Yes	Y	5.5	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7440-09-7 Potassium	1,200	Yes	Y	110	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7439-95-4 Magnesium	3,300	Yes	Y	55	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7439-96-5 Manganese	190	Yes	Y	0.55	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7440-23-5 Sodium	2,000	Yes	Y	110	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7440-02-0 Nickel	13	Yes	Y	2.2	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7439-92-1 Lead	5.9	Yes	Y	0.88	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7440-36-0 Antimony	—	Yes	N	U	2.2	mg/Kg
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03668 7782-49-2 Selenium	—	Yes	N	U	2.2	mg/Kg
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03669 7440-62-2 Vanadium	20	Yes	Y	2.2	mg/Kg	
138-081111-0032	09/13/2011 C-109	10/05/2011 AN03669 7440-66-6 Zinc	41	Yes	Y	2.2	mg/Kg	
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7440-22-4 Silver	—	Yes	N	U	0.55	mg/Kg
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7429-90-5 Aluminum	12,000	Yes	Y	11	mg/Kg	
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7440-38-2 Arsenic	8.2	Yes	Y	0.89	mg/Kg	
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7440-39-3 Barium	24	Yes	Y	11	mg/Kg	
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7440-41-7 Beryllium	0.53	Yes	Y	0.33	mg/Kg	
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7440-70-2 Calcium	1,700	Yes	Y	55	mg/Kg	
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7440-43-9 Cadmium	—	Yes	N	U	0.33	mg/Kg
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7440-48-4 Cobalt	8.4	Yes	Y	2.2	mg/Kg	
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7440-47-3 Chromium	26	Yes	Y	0.55	mg/Kg	
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7440-50-8 Copper	13	Yes	Y	1.1	mg/Kg	
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7439-89-6 Iron	26,000	Yes	Y	5.5	mg/Kg	
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7440-09-7 Potassium	1,800	Yes	Y	110	mg/Kg	
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7439-95-4 Magnesium	4,800	Yes	Y	55	mg/Kg	
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7439-96-5 Manganese	270	Yes	Y	0.55	mg/Kg	
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7440-23-5 Sodium	2,300	Yes	Y	110	mg/Kg	
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7440-02-0 Nickel	19	Yes	Y	2.2	mg/Kg	
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7439-92-1 Lead	8.4	Yes	Y	0.89	mg/Kg	
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7440-36-0 Antimony	—	Yes	N	U	2.2	mg/Kg
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7782-49-2 Selenium	—	Yes	N	U	2.2	mg/Kg
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7440-28-0 Thallium	—	Yes	N	U	2.2	mg/Kg
138-081111-0033	09/13/2011 C-109	10/05/2011 AN03669 7440-62-2 Vanadium	32					

138-081111-0034	09/13/2011 C-109	10/05/2011 AN03670	7440-47-3 Chromium	17	Yes	Y		0.50	mg/Kg
138-081111-0034	09/13/2011 C-109	10/05/2011 AN03670	7440-50-8 Copper	8.3	Yes	Y		1.0	mg/Kg
138-081111-0034	09/13/2011 C-109	10/05/2011 AN03670	7439-89-6 Iron	18,000	Yes	Y		5.0	mg/Kg
138-081111-0034	09/13/2011 C-109	10/05/2011 AN03670	7440-09-7 Potassium	1,100	Yes	Y		100	mg/Kg
138-081111-0034	09/13/2011 C-109	10/05/2011 AN03670	7439-95-4 Magnesium	3,000	Yes	Y		50	mg/Kg
138-081111-0034	09/13/2011 C-109	10/05/2011 AN03670	7439-96-5 Manganese	170	Yes	Y		0.50	mg/Kg
138-081111-0034	09/13/2011 C-109	10/05/2011 AN03670	7440-23-5 Sodium	1,200	Yes	Y		100	mg/Kg
138-081111-0034	09/13/2011 C-109	10/05/2011 AN03670	7440-02-0 Nickel	13	Yes	Y		2.0	mg/Kg
138-081111-0034	09/13/2011 C-109	10/05/2011 AN03670	7439-92-1 Lead	5.6	Yes	Y		0.81	mg/Kg
138-081111-0034	09/13/2011 C-109	10/05/2011 AN03670	7440-36-0 Antimony	---	Yes	N	U	2.0	mg/Kg
138-081111-0034	09/13/2011 C-109	10/05/2011 AN03670	7782-49-2 Selenium	---	Yes	N	U	2.0	mg/Kg
138-081111-0034	09/13/2011 C-109	10/05/2011 AN03670	7440-28-0 Thallium	---	Yes	N	U	2.0	mg/Kg
138-081111-0034	09/13/2011 C-109	10/05/2011 AN03670	7440-62-2 Vanadium	21	Yes	Y		2.0	mg/Kg
138-081111-0034	09/13/2011 C-109	10/05/2011 AN03670	7440-66-6 Zinc	40	Yes	Y		2.0	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7440-22-4 Silver	---	Yes	N	U	0.35	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7429-90-5 Aluminum	2,600	Yes	Y		6.9	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7440-38-2 Arsenic	1.8	Yes	Y		0.55	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7440-39-3 Barium	9.0	Yes	Y		6.9	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7440-41-7 Beryllium	---	Yes	N	U	0.21	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7440-70-2 Calcium	550	Yes	Y		35	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7440-43-9 Cadmium	---	Yes	N	U	0.21	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7440-48-4 Cobalt	2.0	Yes	Y		1.4	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7440-47-3 Chromium	7.0	Yes	Y		0.35	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7440-50-8 Copper	2.7	Yes	Y		0.7	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7439-89-4 Iron	6,700	Yes	Y		3.5	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7440-09-7 Potassium	400	Yes	Y		69	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7439-95-4 Magnesium	1,200	Yes	Y		35	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7439-96-5 Manganese	59	Yes	Y		0.35	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7440-23-5 Sodium	410	Yes	Y		69	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7440-02-0 Nickel	4.4	Yes	Y		1.4	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7439-92-1 Lead	2.9	Yes	Y		0.55	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7440-36-0 Antimony	---	Yes	N	U	1.4	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7782-49-2 Selenium	---	Yes	N	U	1.4	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7440-28-0 Thallium	---	Yes	N	U	1.4	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7440-62-2 Vanadium	7.6	Yes	Y		1.4	mg/Kg
138-081111-0035	09/13/2011 C-109	10/05/2011 AN03671	7440-66-6 Zinc	16	Yes	Y		1.4	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7440-22-4 Silver	---	Yes	N	U	0.38	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7429-90-5 Aluminum	3,700	Yes	Y		7.6	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7440-38-2 Arsenic	2.5	Yes	Y		0.60	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7440-39-3 Barium	13	Yes	Y		7.6	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7440-41-7 Beryllium	---	Yes	N	U	0.23	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7440-70-2 Calcium	710	Yes	Y		38	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7440-43-9 Cadmium	---	Yes	N	U	0.23	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7440-48-4 Cobalt	3.6	Yes	Y		1.5	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7440-47-3 Chromium	9.4	Yes	Y		0.38	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7440-50-8 Copper	3.7	Yes	Y		0.8	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7439-89-6 Iron	9,300	Yes	Y		3.8	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7440-09-7 Potassium	580	Yes	Y		76	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7439-95-4 Magnesium	1,800	Yes	Y		38	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7439-96-5 Manganese	85	Yes	Y		0.38	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7440-23-5 Sodium	620	Yes	Y		76	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7440-02-0 Nickel	7.1	Yes	Y		1.5	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7439-92-1 Lead	2.9	Yes	Y		0.60	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7440-36-0 Antimony	---	Yes	N	U	1.5	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7782-49-2 Selenium	---	Yes	N	U	1.5	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7440-28-0 Thallium	---	Yes	N	U	1.5	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7440-62-2 Vanadium	11	Yes	Y		1.5	mg/Kg
138-081111-0036	09/13/2011 C-109	10/05/2011 AN03672	7440-66-6 Zinc	23	Yes	Y		1.5	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7440-22-4 Silver	---	Yes	N	U	0.32	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7429-90-5 Aluminum	2,400	Yes	Y		6.4	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7440-39-3 Barium	7.7	Yes	Y		0.51	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7440-41-7 Beryllium	---	Yes	N	U	0.19	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7440-70-2 Calcium	540	Yes	Y		32	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7440-43-9 Cadmium	---	Yes	N	U	0.19	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7440-48-4 Cobalt	2.1	Yes	Y		1.3	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7440-47-3 Chromium	6.0	Yes	Y		0.32	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7440-50-8 Copper	2.6	Yes	Y		0.60	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7439-89-6 Iron	6,800	Yes	Y		3.2	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7440-09-7 Potassium	340	Yes	Y		64	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7439-95-4 Magnesium	1,100	Yes	Y		32	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7439-96-5 Manganese	61	Yes	Y		0.32	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7440-23-5 Sodium	380	Yes	Y		64	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7440-02-0 Nickel	4.1	Yes	Y		1.3	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7439-92-1 Lead	2.5	Yes	Y		0.51	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7440-36-0 Antimony	---	Yes	N	U	1.3	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7782-49-2 Selenium	---	Yes	N	U	1.3	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7440-28-0 Thallium	---	Yes	N	U	1.3	mg/Kg
138-081111-0037	09/13/2011 C-109	10/05/2011 AN03673	7440-62-2 Vanadium	6.5	Yes	Y		1.3	mg/Kg
138-081111-0038	09/13/2011 C-109	10/05/2011 AN03673	7440-66-6 Zinc	15	Yes	Y		1.3	mg/Kg
138-081111-0038	09/13/2011 C-109	10/05/2011 AN03674	7440-22-4 Silver	---	Yes	N	U	0.44	mg/Kg
138-081111-0038	09/13/2011 C-109	10/05/2011 AN03674	7439-90-5 Aluminum	4,900	Yes	Y		8.8	mg/Kg
138-081111-0038	09/13/2011 C-109	10/05/2011 AN03674	7440-38-2 Arsenic	4.1	Yes	Y		0.70	mg/Kg
138-081111-0038	09/13/2011 C-109	10/05/2011 AN03674	7440-39-3 Barium	23	Yes	Y		8.8	mg/Kg
138-081111-0038	09/13/2011 C-109	10/05/2011 AN03674	7440-41-7 Beryllium	---	Yes	N	U	0.26	mg/Kg
138-081111-0038	09/13/2011 C-109	10/05/2011 AN03674	7440-70-2 Calcium	1,200	Yes	Y		44	mg/Kg
138-081111-0038	09/13/2011 C-109	10/05/2011 AN03674	7440-43-9 Cadmium	---	Yes	N	U	0.26	mg/Kg
138-081111-0038	09/13/2011 C-109	10/05/2011 AN03674	7440-48-4 Cobalt	4.4	Yes	Y		1.8	mg/Kg
138-081111-0038	09/13/2011 C-109	10/05/2011 AN03674	7440-47-3 Chromium	16	Yes	Y		0.44	mg/Kg
138-081111-0038	09/13/2011 C-109	10/05/2011 AN03674	7440-50-8 Copper	6.8	Yes	Y		0.90	mg/Kg
138-081111-0038	09/13/2011 C-109	10/05/2011 AN03674	7439-89-6 Iron	14,000	Yes	Y		4.4	mg/Kg
138-081111-0038	09/13/2011 C-109	10/05/2011 AN03674	7440-09-7 Potassium	790	Yes	Y		88	mg/Kg
138-081111-0038	09/13/2011 C-109	10/05/2011 AN03674	7439-95-4 Magnesium	2,300	Yes	Y		44	mg/Kg
138-081111-003									

138-081011-0027	08/10/2011 C-109	08/25/2011 AN03619	7440-36-0	Antimony	—	Yes	N	U	20	ug/L
138-081011-0027	08/10/2011 C-109	08/25/2011 AN03619	7782-49-2	Selenium	—	Yes	N	U	40	ug/L
138-081011-0027	08/10/2011 C-109	08/25/2011 AN03619	7440-28-0	Thallium	—	Yes	N	U	20	ug/L
138-081011-0027	08/10/2011 C-109	08/25/2011 AN03619	7440-62-2	Vanadium	—	Yes	N	U	20	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-66-4	Zinc	—	Yes	N	U	20	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-22-4	Silver	—	Yes	N	U	5	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7429-90-5	Aluminum	710	Yes	Y	—	100	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-38-2	Arsenic	—	Yes	N	U	8	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-39-3	Barium	—	Yes	N	U	100	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-41-7	Beryllium	—	Yes	N	U	3	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-70-2	Calcium	5,600	Yes	Y	—	500	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-43-9	Cadmium	—	Yes	N	U	3	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-48-4	Cobalt	—	Yes	N	U	20	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-47-3	Chromium	18	Yes	Y	—	5	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-50-8	Copper	27	Yes	Y	—	20	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7439-89-9	Iron	19,000	Yes	Y	—	50	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-09-7	Potassium	—	Yes	N	U	500	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7439-95-4	Magnesium	1,100	Yes	Y	—	500	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7439-96-5	Manganese	370	Yes	Y	—	5	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-23-5	Sodium	1,200	Yes	Y	—	1000	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-02-0	Nickel	23	Yes	Y	—	20	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7439-92-1	Lead	1,900	Yes	Y	—	8	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-36-0	Antimony	—	Yes	N	U	20	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7782-49-2	Selenium	—	Yes	N	U	40	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-28-0	Thallium	—	Yes	N	U	20	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-62-2	Vanadium	—	Yes	N	U	20	ug/L
138-081011-0028	08/10/2011 C-109	08/25/2011 AN03620	7440-66-4	Zinc	54	Yes	Y	—	20	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7440-22-4	Silver	—	Yes	N	U	5	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7429-90-5	Aluminum	—	Yes	N	U	100	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7440-38-2	Arsenic	—	Yes	N	U	8	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7440-39-3	Barium	—	Yes	N	U	100	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7440-41-7	Beryllium	—	Yes	N	U	3	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7440-70-2	Calcium	—	Yes	N	U	500	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7440-43-9	Cadmium	—	Yes	N	U	3	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7440-48-4	Cobalt	—	Yes	N	U	20	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7440-47-3	Chromium	—	Yes	N	U	5	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7440-50-8	Copper	—	Yes	N	U	20	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7439-89-9	Iron	—	Yes	N	U	50	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7440-09-7	Potassium	—	Yes	N	U	500	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7439-95-4	Magnesium	—	Yes	N	U	500	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7439-96-5	Manganese	—	Yes	N	U	5	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7440-23-5	Sodium	—	Yes	N	U	1000	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7440-02-0	Nickel	—	Yes	N	U	20	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7439-92-1	Lead	—	Yes	N	U	8	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7440-36-0	Antimony	—	Yes	N	U	20	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7782-49-2	Selenium	—	Yes	N	U	40	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7440-28-0	Thallium	—	Yes	N	U	20	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7440-62-2	Vanadium	—	Yes	N	U	20	ug/L
138-081011-0029	08/10/2011 C-109	08/25/2011 AN03621	7440-66-4	Zinc	—	Yes	N	U	20	ug/L
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7440-22-4	Silver	1.5	Yes	Y	—	0.33	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7429-90-5	Aluminum	15,000	Yes	Y	—	7	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7440-38-2	Arsenic	15	Yes	Y	—	0.52	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7440-39-3	Barium	150	Yes	Y	—	7	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7440-41-7	Beryllium	18	Yes	Y	—	0.20	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7440-70-2	Calcium	14,000	Yes	Y	—	33	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7440-43-9	Cadmium	5.0	Yes	Y	—	0.20	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7440-48-4	Cobalt	120	Yes	Y	—	1.3	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7440-47-3	Chromium	230	Yes	Y	—	0.33	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7440-50-8	Copper	2,400	Yes	Y	—	0.7	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7439-89-9	Iron	110,000	Yes	Y	—	33.0	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7440-09-7	Potassium	2,000	Yes	Y	—	66	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7439-95-5	Magnesium	7,500	Yes	Y	—	33	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7439-96-5	Manganese	860	Yes	Y	J	0.33	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7440-23-5	Sodium	4,900	Yes	Y	—	66	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7440-02-0	Nickel	840	Yes	Y	—	1.3	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7439-92-1	Lead	2,900	Yes	Y	—	0.52	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7440-36-0	Antimony	1.7	Yes	Y	—	1.3	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7782-49-2	Selenium	—	Yes	N	U	1.3	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7440-28-0	Thallium	—	Yes	N	U	1.3	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7440-62-2	Vanadium	940	Yes	Y	—	1.3	mg/Kg
138-081111-0039	09/13/2011 C-109	10/05/2011 AN03675	7440-66-4	Zinc	14,000	Yes	Y	—	13.0	mg/Kg
138-081111-0039	09/13/2011 C-110	10/07/2011 AN03675	7439-97-6	MERCURY	0.62	Yes	Y	—	0.05	mg/Kg
138-081111-0040	09/13/2011 C-109	10/05/2011 AN03676	7440-22-4	Silver	1.6	Yes	Y	—	0.44	mg/Kg
138-081111-0040	09/13/2011 C-109	10/05/2011 AN03676	7429-90-5	Aluminum	18,000	Yes	Y	—	9	mg/Kg
138-081111-0040	09/13/2011 C-109	10/05/2011 AN03676	7440-38-2	Arsenic	30	Yes	Y	—	0.71	mg/Kg
138-081111-0040	09/13/2011 C-109	10/05/2011 AN03676	7440-39-3	Barium	180	Yes	Y	—	9	mg/Kg
138-081111-0040	09/13/2011 C-109	10/05/2011 AN03676	7440-41-7	Beryllium	15	Yes	Y	—	0.27	mg/Kg
138-081111-0040	09/13/2011 C-109	10/05/2011 AN03676	7440-70-2	Calcium	15,000	Yes	Y	—	44	mg/Kg
138-081111-0040	09/13/2011 C-109	10/05/2011 AN03676	7440-43-9	Cadmium	0.43	Yes	Y	—	0.27	mg/Kg
138-081111-0040	09/13/2011 C-109	10/05/2011 AN03676	7440-48-4	Cobalt	140	Yes	Y	—	1.8	mg/Kg
138-081111-0040	09/13/2011 C-109	10/05/2011 AN03676	7440-47-3	Chromium	210	Yes	Y	—	0.44	mg/Kg
138-081111-0040	09/13/2011 C-109	10/05/2011 AN03676	7440-50-8	Copper	2,900	Yes	Y	—	0.9	mg/Kg
138-081111-0040	09/13/2011 C-109	10/05/2011 AN03676	7439-89-6	Iron	110,000	Yes	Y	—	44.0	mg/Kg
138-081111-0040	09/13/2011 C-109	10/05/2011 AN03676	7440-09-7	Potassium	2,500	Yes	Y	—	89	mg/Kg
138-081111-0040	09/13/2011 C-109	10/05/2011 AN03676	7439-95-4	Magnesium	7,600	Yes	Y	—	44	mg/Kg
138-081111-0040	09/13/2011 C-109	10/05/2011 AN03676	7439-96-5	Manganese	1,000	Yes	Y	—	0.44	mg/Kg
138-081111-0040	09/13/2011 C-109	10/05/2011 AN03676	7440-23-5	Sodium	5,800	Yes	Y	—	89	mg/Kg
138-081111-0040	09/13/2011 C-109	10/05/2011 AN03676	7440-02-0	Nickel	440	Yes	Y	—	1.8	mg/Kg
138-081111-0040	09/13/201									

138-081111-0046	09/13/2011 C-109	10/05/2011 AN03682	7440-02-0	Nickel	65	Yes	Y		3.0	mg/Kg
138-081111-0046	09/13/2011 C-109	10/05/2011 AN03682	7439-92-1	Lead	1,300	Yes	Y		1.19	mg/Kg
138-081111-0046	09/13/2011 C-109	10/05/2011 AN03682	7440-36-4	Antimony	4.2	Yes	Y		3.0	mg/Kg
138-081111-0046	09/13/2011 C-109	10/05/2011 AN03682	7782-49-2	Selenium	—	Yes	N	U	3.0	mg/Kg
138-081111-0046	09/13/2011 C-109	10/05/2011 AN03682	7440-28-0	Thallium	—	Yes	N	U	3.0	mg/Kg
138-081111-0046	09/13/2011 C-109	10/05/2011 AN03682	7440-62-2	Vanadium	49	Yes	Y		3.0	mg/Kg
138-081111-0046	09/13/2011 C-109	10/05/2011 AN03682	7440-66-6	Zinc	600	Yes	Y		3.0	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7440-22-4	Silver	3.6	Yes	Y		0.75	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7429-90-5	Aluminum	16,000	Yes	Y		15	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7440-38-2	Arsenic	83	Yes	Y		1.19	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7440-39-3	Barium	230	Yes	Y		15	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7440-41-7	Beryllium	0.83	Yes	Y		0.45	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7440-70-2	Calcium	5,400	Yes	Y		75	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7440-43-9	Cadmium	0.80	Yes	Y		0.45	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7440-48-4	Cobalt	12	Yes	Y		3.0	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7440-47-3	Chromium	160	Yes	Y		0.75	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7440-50-8	Copper	340	Yes	Y		1.5	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7439-89-6	Iron	36,000	Yes	Y		7.5	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7440-99-7	Potassium	2,900	Yes	Y		150	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7439-95-4	Magnesium	7,200	Yes	Y		75	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7439-96-5	Manganese	540	Yes	Y		0.75	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7440-23-5	Sodium	3,700	Yes	Y		150	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7440-02-0	Nickel	73	Yes	Y		3.0	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7439-92-1	Lead	1,400	Yes	Y		1.19	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7440-36-4	Antimony	—	Yes	N	U	3.0	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7782-49-2	Selenium	—	Yes	N	U	3.0	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7440-28-0	Thallium	—	Yes	N	U	3.0	mg/Kg
138-081111-0047	09/13/2011 C-109	10/05/2011 AN03683	7440-62-2	Vanadium	56	Yes	Y		3.0	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03683	7440-66-6	Zinc	640	Yes	Y		0.88	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7440-22-4	Silver	4.6	Yes	Y		18	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7439-90-5	Aluminum	16,000	Yes	Y		1.41	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7440-38-2	Arsenic	66	Yes	Y		18	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7440-39-3	Barium	270	Yes	Y		18	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7440-41-7	Beryllium	0.83	Yes	Y		0.53	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7440-70-2	Calcium	6,000	Yes	Y		88	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7440-43-9	Cadmium	1.5	Yes	Y		0.53	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7440-48-4	Cobalt	11	Yes	Y		3.5	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7440-47-3	Chromium	170	Yes	Y		0.88	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7440-50-8	Copper	350	Yes	Y		1.8	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7439-89-6	Iron	36,000	Yes	Y		8.8	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7440-09-7	Potassium	3,300	Yes	Y		180	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7439-95-4	Magnesium	8,300	Yes	Y		88	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7439-96-5	Manganese	450	Yes	Y		0.88	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7440-23-5	Sodium	12,000	Yes	Y		180	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7440-02-0	Nickel	56	Yes	Y		3.5	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7439-92-1	Lead	870	Yes	Y		1.41	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7440-36-4	Antimony	—	Yes	N	U	3.5	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7782-49-2	Selenium	—	Yes	N	U	3.5	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7440-28-0	Thallium	—	Yes	N	U	3.5	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7440-62-2	Vanadium	49	Yes	Y		3.5	mg/Kg
138-081111-0048	09/13/2011 C-109	10/05/2011 AN03684	7440-66-6	Zinc	610	Yes	Y		3.5	mg/Kg
138-081111-0048	09/13/2011 C-110	10/07/2011 AN03684	7439-97-4	MERCURY	4.5	Yes	Y		0.05	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7440-22-4	Silver	4.3	Yes	Y		0.65	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7429-90-5	Aluminum	16,000	Yes	Y		13	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7440-38-2	Arsenic	66	Yes	Y		1.05	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7440-39-3	Barium	260	Yes	Y		13	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7440-41-7	Beryllium	0.80	Yes	Y		0.39	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7440-70-2	Calcium	6,900	Yes	Y		65	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7440-43-9	Cadmium	1.5	Yes	Y		0.39	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7440-48-4	Cobalt	11	Yes	Y		2.6	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7440-47-3	Chromium	170	Yes	Y		0.65	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7440-50-8	Copper	360	Yes	Y		1.3	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7439-89-4	Iron	34,000	Yes	Y		6.5	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7440-09-7	Potassium	3,200	Yes	Y		130	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7439-95-4	Magnesium	8,000	Yes	Y		65	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7439-96-5	Manganese	490	Yes	Y		0.65	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7440-23-5	Sodium	9,400	Yes	Y		130	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7440-02-0	Nickel	47	Yes	Y		2.6	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7439-92-1	Lead	680	Yes	Y		1.05	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7440-36-4	Antimony	—	Yes	N	U	2.6	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7782-49-2	Selenium	2.9	Yes	Y		2.6	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7440-28-0	Thallium	—	Yes	N	U	2.6	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7440-62-2	Vanadium	49	Yes	Y		2.6	mg/Kg
138-081111-0049	09/13/2011 C-109	10/05/2011 AN03685	7440-66-6	Zinc	570	Yes	Y		2.6	mg/Kg

Appendix H
Sediment Core Logs
Jewett White Lead Site 2011 Field Activities
Jewett White Lead Site
Staten Island, New York
December 15, 2011

Project No: 0-138

Log of Borehole: JWL-SED-1

Project: Jewett White Lead Site

Client: EPA/ERT

Location: Kill Van Kull

Logged By: J. Bolduc

Northing (Feet): 658,529.4

Easting (Feet): 594,861.3

Date: 9/13/11

SUBSURFACE PROFILE		SAMPLE			Notes
Depth	Symbol	Description	Number	Type	
0 ft m 0		Sediment Surface SILT Black (5YR2/1), and fine to coarse angular gravel, very soft, nonplastic, wet.	JWL-SED-1A	△△	Vibracored to refusal at depth of 4.3 feet.
1			JWL-SED-1B	△△	
2			JWL-SED-1C	△△	
3			JWL-SED-1D	△△	
4			JWL-SED-1E	△△	
5			JWL-SED-1F	△△	
6			JWL-SED-1G	△△	
7			JWL-SED-1H	△△	
8			JWL-SED-1I	△△	
9		End of Borehole			
10					

Drill Method: Vibracore

Drill Company: Atlantic Testing Laboratories

Hole Size: 4 inches

**Lockheed Martin/SERAS
2890 Woodbridge Avenue
Building 209 Annex
Edison, NJ 08837**

Sheet: 1 of 1

Project No: 0-138

Log of Borehole: JWL-SED-4

Project: Jewett White Lead Site

Client: EPA/ERT

Location: Kill Van Kull

Logged By: J. Bolduc

Northing (Feet): 658,585.0

Easting (Feet): 594,922.9

Date: 9/13/11

SUBSURFACE PROFILE		SAMPLE			Notes
Depth ft m	Symbol	Description	Number	Type	
0		Sediment Surface			
		SAND Dark gray (5YR4/1), fine grained, some silt, loose, trace large shells and glass fragment, wet.	JWL-SED-4A	△△	
			JWL-SED-4B	△△	
			JWL-SED-4C	△△	
			JWL-SED-4D	△△	
1		CLAY Dark gray (5YR4/1), some silt, soft, slightly plastic, some shell fragments, wet.	JWL-SED-4E	△△	
		SAND Dark gray (5YR4/1), fine to coarse grained, subangular, some silt, trace fine subangular gravel, loose, wet.	JWL-SED-4F	△△	
			JWL-SED-4G	△△	
			JWL-SED-4H	△△	
			JWL-SED-4I	△	
3		End of Borehole			
4					
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Drill Method: Vibracore

Drill Company: Atlantic Testing Laboratories

Hole Size: 4 inches

**Lockheed Martin/SERAS
2890 Woodbridge Avenue
Building 209 Annex
Edison, NJ 08837**

Sheet: 1 of 1

Project No: 0-138

Log of Borehole: JWL-SED-5

Project: Jewett White Lead Site

Client: EPA/ERT

Location: Kill Van Kull

Logged By: J. Bolduc

Northing (Feet): 658,546.0

Easting (Feet): 595,002.3

Date: 9/13/11

SUBSURFACE PROFILE		SAMPLE			Notes
Depth ft m	Symbol	Description	Number	Type	
0		Sediment Surface			
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Drill Method: Vibracore

Drill Company: Atlantic Testing Laboratories

Hole Size: 4 inches

**Lockheed Martin/SERAS
2890 Woodbridge Avenue
Building 209 Annex
Edison, N.J. 08837**

Sheet: 1 of 1

Project No: 0-138

Log of Borehole: JWL-SED-6

Project: Jewett White Lead Site

Client: EPA/ERT

Location: Kill Van Kull

Logged By: J. Bolduc

Northing (Feet): 658,658.8

Easting (Feet): 594,992.6

Date: 9/13/11

SUBSURFACE PROFILE		SAMPLE			Notes
Depth	Symbol	Description	Number	Type	
0 ft m 0		Sediment Surface SILT Black (5YR2.5/1), little fine sand and clay, rootlets, mica flakes, very soft in upper 0.75 foot, soft from 0.75 to 10 feet, nonplastic, wet.	JWL-SED-6A	△	
1			JWL-SED-6B	△	
2			JWL-SED-6C	△	
3			JWL-SED-6D	△	
4			JWL-SED-6E	△	
5			JWL-SED-6F	△	
6			JWL-SED-6G	△	
7			JWL-SED-6H	△	
8			JWL-SED-6I	△	
9					
10					

Drill Method: Vibracore

**Lockheed Martin/SERAS
2890 Woodbridge Avenue
Building 209 Annex
Edison NJ 08837**

Drill Company: Atlantic Testing Laboratories

Hole Size: 4 inches

Sheet: 1 of 1

Appendix I
GPS Coordinates of Sampling Locations
Jewett White Lead Site 2011 Field Activities
Jewett White Lead Site
Staten Island, New York
December 15, 2011

GPS Coordinates of the 2011 Sampling Locations at the Jewett White Lead Site

Location	Latitude	Longitude	POINT_X	POINT_Y
JWL-Soil1	40.639923	-74.128010	948723.43740200000	172443.55218200000
JWL-Soil2	40.639781	-74.128018	948721.00053300000	172391.77779100000
JWL-Soil3	40.639466	-74.127999	948726.05177100000	172276.89856000000
JWL-Soil4	40.639983	-74.128449	948601.54507500000	172465.65924500000
JWL-Soil5	40.639516	-74.128428	948607.03935300000	172295.54217400000
JWL-Soil6	40.639982	-74.128738	948521.20177300000	172465.31333100000
JWL-Soil7	40.639842	-74.128751	948517.57413900000	172414.40018700000
JWL-Soil8	40.639514	-74.128844	948491.54644400000	172295.01665500000
JWL-Soil9	40.640072	-74.129076	948427.56901600000	172498.12819700000
JWL-Soil10	40.639832	-74.129145	948408.19175800000	172411.00617600000
JWL-Soil11	40.639507	-74.129202	948392.23827400000	172292.47692600000
JWL-Soil12	40.639840	-74.129394	948339.15513700000	172413.84274700000
JWL-Soil13	40.639550	-74.129440	948326.14582200000	172308.18858600000
JWL-Soil14	40.640533242	-74.130499108	948032.83636900000	172666.88685800000
JWL-Soil15	40.640348923	-74.130621308	947998.82228200000	172599.78504300000
JWL-Soil16	40.640815339	-74.130850827	947935.37813300000	172769.80769400000
JWL-Soil17	40.640603852	-74.130735782	947967.19104700000	172692.70971700000
JWL-Soil18	40.640828352	-74.131070519	947874.41485400000	172774.64002000000
kvk-1	40.640608	-74.129914	948195.1682280000	172693.8479720000
kvk-2	40.640508	-74.129740	948243.3969680000	172657.2374410000
kvk-3	40.640407	-74.129506	948308.3542490000	172620.4363480000
kvk-4	40.640314	-74.129289	948368.6169760000	172586.3614480000
MSC-1	40.640533	-74.129986	948175.3417450000	172666.7126630000
MSC-2	40.639769	-74.129881	948203.96568900000	172388.19802500000
MSC-3	40.640456	-74.129821	948221.1009660000	172638.3375940000
MSC-4	40.640329	-74.129577	948288.6733470000	172592.1005800000
MSC-5	40.640197	-74.129350	948351.4869750000	172544.0335290000